S. HRG. 99-262 PT. 1

Senate Hearings

Before the Committee on Appropriations

Agriculture, Rural Development, and Related Agencies Appropriations

Fiscal Year 1986

99th CONGRESS, FIRST SESSION

H.R. 3037

PART 1—(Pages 1-929)
DEPARTMENT OF AGRICULTURE
FARM CREDIT ADMINISTRATION

S181-1

S. HRG. 99-262 PT. 1

AGRICULTURE, RURAL DEVELOPMENT, AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 1986

HEARINGS

BEFORE A

SUBCOMMITTEE OF THE

COMMITTEE ON APPROPRIATIONS

UNITED STATES SENATE

NINETY-NINTH CONGRESS

FIRST SESSION

ON

H.R. 3037

AN ACT MAKING APPROPRIATIONS FOR AGRICULTURE, RURAL DEVELOPMENT, AND RELATED AGENCIES PROGRAMS FOR THE FISCAL YEAR ENDING SEPTEMBER 30, 1986, AND FOR OTHER PURPOSES

PART 1 (Pages 1-929)

DEPARTMENT OF AGRICULTURE
FARM CREDIT ADMINISTRATION

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AGRICULTURE, RURAL DEVELOPMENT, AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 1986

TUESDAY, MARCH 5, 1985

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, DC.

The subcommittee met at 9:30 a.m. in room SD–124, Dirksen Senate Office Building, Hon. Thad Cochran (chairman) presiding.

Present: Senators Cochran, Andrews, Burdick, Specter, Abdnor, Kasten, Mattingly, Bumpers, Sasser, and Harkin.

DEPARTMENT OF AGRICULTURE

SECRETARY OF AGRICULTURE

STATEMENT OF JOHN R. BLOCK, SECRETARY OF AGRICULTURE

ACCOMPANIED BY:
- RANDY M. RUSSELL, EXECUTIVE ASSISTANT TO THE SECRETARY
- STEPHEN B. DEWHURST, BUDGET OFFICER, DEPARTMENT OF AGRICULTURE

OPENING REMARKS

Senator COCHRAN. The subcommittee will please come to order. This morning, we will begin our hearings on the portion of the President's 1986 budget which requests funding for the programs under the jurisdiction of the Subcommittee on Agriculture, Rural Development and Related Agencies.

For the next 6 weeks, the subcommittee will be receiving testimony from officials of the U.S. Department of Agriculture and its various agencies; from the Food and Drug Administration; and the Commodity Futures Trading Commission. We will also hear from Members of Congress and interested persons from the private sector.

All this testimony will be most helpful and important to the subcommittee as we attempt to determine the proper level of funding for the many programs under our jurisdiction. These programs include farm income and support, research and extension, conservation, rural development, nutrition, and various inspection services.

It is clear that we are faced with a very difficult budget year. The goal of this subcommittee will be to do its share to bring Federal spending under control.

At the same time, however, we believe it is important to maintain necessary support for our agriculture sector and for rural development activities. I worry that some of the administration's proposals could have an adverse impact on the rural areas of our country in general and agriculture in particular.

For example, the budget proposes the elimination of the rural housing programs of the Farmers Home Administration. These programs not only provide needed housing for low-income rural families but they also provide jobs and capital in rural communities, many of which have suffered under the sagging farm economy.

It is estimated that for every $1 billion in single-family housing assistance, approximately 29,400 homes are constructed, 50,000 man-years of employment are created, and the economy is improved by $5 billion as wages are expended in local communities.

Some of the other concerns I have are the proposed elimination of all of the rural development loan and grant programs, including the Business and Industrial Program and the Water and Waste Disposal Loan and Grant Programs; the proposed phase-down of Soil and Water Conservation Programs; and the proposed phaseout of the Rural Electrification and Telephone Programs. This subcommittee, however, intends to weigh all of these requests very carefully.

Before we present our witnesses today, I want to take this opportunity to acknowledge that we will probably have a new ranking member, Quentin Burdick, serving on the other side of the aisle, to take the place of Tom Eagleton, who I understand, is moving over to the Foreign Relations Committee. We want to welcome him and state that we look forward to the benefit of his counsel and advice.

I also want to acknowledge the presence of the other Senator from North Dakota, my very good friend, with whom I served in the House for many years, with whom I work very closely here in the Senate, for whom I have the greatest respect and affection, Mark Andrews, a real giant in many ways in the Senate.

I also want to welcome the Secretary of Agriculture, who is our lead-off witness in this series of hearings. He has a tough job in this town—one of the toughest, right now, I suppose, in Government. He has a lot of ability and a lot of experience. We wish you well as you wrestle with the problems that confront the agriculture sector. We hope to work in a constructive way with you to find answers for some of the problems that are besetting some of the farms and the rural sectors of our country.

PREPARED STATEMENT

We have a written statement, which you have submitted to the committee. We thank you for that and we will include it, in its entirety, at this point in the record.

[The statement follows:]

STATEMENT OF JOHN R. BLOCK

Mr. Chairman and members of the Committee, I am pleased to appear before you to discuss the programs of the U.S. Department of Agriculture and our FY 1986 budget proposals.

The current and prospective fiscal year will be an extremely important period for the agricultural sector. During this period we will be considering a new farm bill, we will be acting on ways to reduce the Federal deficit, and in the next few months we will be trying to help financially stressed farmers through their difficulties.

We believe that it is important for the health of the agricultural sector as well as all sectors of our economy that the Federal deficit be reduced. The budget deficit and its impact particularly on interest and exchange rates has had a devastating effect on sectors such as agriculture. It is in the best interest of farmers and the nation to implement an effective means of controlling outlays and bring the deficit down. It was in this context that the President's budget was developed.

Even though USDA spending is a small part of the Federal budget (4.7 percent), USDA outlays have grown significantly in the past four years -- from $26 billion in FY 1981 to $45.1 billion now estimated for FY 1985. This rate of growth in USDA spending has been 50 percent greater than the growth in total Federal spending over this period -- a 73.5 percent increase in USDA spending versus a 47.3 percent increase in Federal spending. Most of the increase in USDA's spending has been in the farm price support area, due to the increasing cost of farm legislation enacted in recent years. There has also been tremendous growth in USDA's portfolio of outstanding loans. It should be noted that this growth -- with its great contingent Federal liability -- is largely obscured by the traditional Federal budget process. Through new farm legislation and other program changes, we are proposing significant reductions in USDA spending over the next few years.

Before addressing our specific budget proposals, I would first like to review the current agricultural situation.

Current Agricultural Situation

Over the past four years we have seen a divergence from past trends in the supply and demand for agricultural products. During the 1970's worldwide demand for agricultural products was outpacing supply. Foreign trade was growing at a rapid rate and stocks were reduced. Many prognosticators were forecasting a continuation of the high growth in demand into the 1980's and 1990's. However, these forecasts proved to be wrong. In only a few short years, a surplus supply situation developed. A worldwide recession and mounting debt problems in the developing world slowed demand growth. At the same time, global supplies increased greatly because of favorable growing conditions and the incentives provided by governments, including the U.S. with our increasing loan rates, and target prices. As a result, exports fell and our stocks grew to excessive levels.

To reduce these excessive stocks, we implemented the 1983 payment-in-kind (PIK) program -- the largest acreage reduction program in history. However, other countries increased their production of most commodities when we were cutting back, placing the burden of global adjustment almost entirely on the U.S. farmer and the American taxpayer. As a result of PIK and the drought we experienced, U.S. crop output in 1983 was reduced 14 percent below the 1980 level.

Growing conditions during crop year 1984 were much improved from 1983. Our estimates indicate expanded domestic production and a modest increase in export volume. Stocks will remain high and prices will be at or near loan rates for most commodities. Net farm income for calendar year 1985 will probably fall within a range of $19 to $24 billion compared to $29 to $33 billion expected for 1984.

The outlook for the rest of the 1980's points to a continuation of the current supply and demand imbalance. Although there could be years of production shortfalls, the adoption of new technology could be a source of rapid agricultural output increases.

This is the environment in which the new farm bill will operate. The choice before us is whether we want to maintain the costly current programs and become even less competitive in world markets or whether we want to have market-oriented programs that allow our farmers to make use of their great efficiency and productivity to compete for world markets. We believe the latter course is the one that should be followed, not only because it will lead to a more prosperous farm sector over the longer term, but because it will also reduce the burden on taxpayers and the Federal deficit.

Farm Credit Situation

The farm credit situation is receiving more attention than ever before. During the 1970's, land value appreciation exceeded the cost of borrowing; thus, for many farmers, it made economic sense to borrow against the land to finance the purchase of additional land or equipment. Today, the situation is reversed, and those who borrowed heavily to finance land purchases at inflated prices are now experiencing capital losses and may be forced to relinquish ownership of the land. As a result, many farmers are under financial stress.

While we sympathize with those farmers who are being forced to make adjustments to the new economic conditions, it should be recognized that not all farmers are in the same condition. Those farmers who have not been efficient enough to earn an adequate return on their operating capital, labor and management and have survived so far by borrowing against their equity in land will find it difficult to continue farming. On the other hand, those farmers who are efficient enough to compete in the market may only need to restructure their debts. Some of these farmers may need to sell off some of their assets. In spite of all the financial difficulties, opportunities still exist for farm ownership. These opportunities may be enhanced in the long run as land values tend to stabilize and reflect more fully actual returns from production rather than inflation.

It also should be recognized that the market for farm credit for operating purposes is working. Total farm debt declined slightly last year to a level of about $213 billion, reflecting a decrease in net lending, primarily by CCC, individuals and other non-institutional lenders, as well as the Production Credit Associations. However, net lending by banks increased by $2.8 billion in 1984. Banks received repayments on farm operating loans amounting to nearly $60 billion (down from about $67 billion in 1983) while they made new loans of about $63 billion (down from about $70 billion in 1983). These banks account for about 40 percent of the $102 billion debt outstanding for farm operating purposes.

These figures show that banks are making operating loans to farmers and that farmers, in turn, are repaying these loans. Loan-to-deposit ratios at banks have also improved over the last few years, indicating that farm operating credit is available for those who can show repayment ability. Furthermore, interest rates on farm operating loans have declined significantly and, hopefully, will continue to decline.

Now, let me turn to the role of the Federal Government in providing farm credit. On February 6, 1985, I announced a number of additions to the President's program of farm credit initiatives that have been in effect since September of last year. In short, the additions provide for improved cooperation and monitoring of the farm credit situation, greater forebearance in servicing farm borrowers who are in trouble, and increased flexibility in the administration of FmHA's farm lending. One specific change -- allowing private lenders the option of writing down interest instead of principal to qualify borrowers for FmHA's guarantee of the loan balance -- was made at the request of private lenders. We now expect to see a significant increase in participation by these lenders in the FmHA program. FmHA has about $600 million still available for guaranteeing farm operating loans this year. For FY 1986, we are requesting that the program be increased to $3 billion.

FmHA also stands ready to serve its 270,000 farm borrowers through deferrals, subordinations, rescheduling and refinancing. In FY 1984, about 65,000 borrowers received such assistance. Many more borrowers are likely to be so assisted in FY 1985 as part of the President's farm credit initiatives. In FY 1986, and beyond, FmHA will continue to service its existing caseload, while shifting from direct to guaranteed lending in making new loans.

FmHA's servicing actions are being undertaken on a case-by-case basis. Every effort will be made to provide the proper assistance needed by the individual borrowers. FmHA's record of success in providing this assistance has been remarkable -- over 97 percent of its borrowers are able to stay in business, year after year, even though they have been denied credit by other lenders. We are confident that the agency will continue to achieve the highest possible level of success in keeping its borrowers in business.

It also should be noted that the Commodity Credit Corporation (CCC) has been providing significant amounts of operating cash to farmers to keep them going during this difficult period. Between December 1984 and April 1985, it is estimated that CCC will have provided over $12 billion in loans and direct payments to farmers, representing over 75 percent of the expected total of CCC loans and payments during FY 1985.

With this background on the state of farm credit and agriculture in general, I would like to discuss our budget proposals for FY 1986.

Budget Proposals for FY 1986

The program level for all the Department's activities in FY 1986 is projected at $58.4 billion. This level of activity is $12.2 billion below the estimated $70.7 billion level for FY 1985. Outlays are estimated at $38.5 billion for FY 1986 compared to $45.1 billion for FY 1985. The reduction results from a number of program changes that are required to help reduce the Federal deficit. The reductions proposed for FY 1986 are a first installment in the path of declining expenditures which will occur over the next five years. We project that over the FY 1986-1990 period savings of about $60 billion can be achieved in the Department's budget. Most of these savings (66 percent) will come in the price support and related expenditures of the CCC.

In recent years, CCC outlays for farm price support activities have risen dramatically as large crops and reduced exports have created grain surpluses. In FY 1983, CCC outlays reached an all time high of $18.9 billion. The PIK program and the 1983 drought reduced these outlays to $7.3 billion in FY 1984, but outlays are currently projected to increase to $15 billion for FY 1985. For FY 1986, outlays are projected to be about $10.5 billion. They are lower because part of the deficiency payments for the 1985 crops are being advanced and will be paid in FY 1985 rather than FY 1986. Also, no advance payments for paid acreage diversion programs for the 1986 crops are included because no such programs are assumed to be offered.

The 1985 Farm Bill will have no appreciable impact on outlays in FY 1986 since these outlays are largely associated with the 1985 crops, which are covered by the 1981 Act, as amended. The new Farm Bill will take effect with 1986 crops and will primarily affect outlays in FY 1987 and subsequent fiscal years.

The legislation the Administration is proposing calls for a market-oriented farm program. Our Farm Bill would set price support loans and target prices in relation to market prices and there would be a phase-out of acreage reduction programs so that farmers' production decisions are guided by market signals rather than the government. With these program changes, it is expected that farmers will derive a greater share of their income from the marketplace and will be able to sell more competitively in world markets.

The Administration's Farm Bill proposal is expected to generate significant savings when compared to a continuation of current programs. If current programs were continued, projected CCC outlays would range from $60-$85 billion over FY 1987-1991. This would continue the upward trend in the cost of farm legislation -- from $12.7 billion under the 1973 Farm Bill to $27.7 billion under the 1977 Farm Bill to an estimated $63.3 billion under the 1981 Farm Bill.

Our proposal, on the other hand, should reduce CCC outlays to between $20-$35 billion over FY 1987-91 and would be more in line with the outlays of the 1960's and 1970's. Annual CCC outlays would gradually drop from $10.5 billion in FY 1986 to $3-$5 billion annually over the FY 1989-91 period. A continuation of current programs would cause outlays to remain high -- in the $12-$17 billion range annually. Thus, the proposed legislation would save about $40-$50 billion over the FY 1987-91 period.

Export Market Development

Expansion of U.S. agricultural exports remains a top priority of this Administration. The farm legislation we are proposing is designed to enhance our export growth and to recapture markets we have lost in the past several years. We believe the market-oriented Farm Bill we are advocating will help U.S. farmers compete on a more favorable basis. Moreover, the Administration is committed to promoting open access to world markets for our exports and to provide for fair trade practices in international markets. In this regard we are beginning discussions in the GATT Committee on Trade in Agriculture to address these matters. We also will continue to enhance the U.S. image as a reliable supplier by eliminating the use of agricultural embargoes and by guaranteeing the sanctity of export contracts.

For FY 1985 and FY 1986, the General Sales Manager will make available the all-time high level of $5.0 billion in export credit guarantees to promote the sales of U.S. agricultural exports. Over the period FY 1982 through FY 1986, we will have made available some $22 billion in export credit guarantees to finance the sale of U.S. agricultural products abroad. In addition, $325 million in CCC direct export credit will be made available during FY 1985. A portion of this direct credit will again be used in the blended credit program that was begun in FY 1983 to meet credit competition from other exporters.

We also plan to continue funding the Foreign Agricultural Service (FAS) in FY 1986 near the FY 1985 level. In its foreign market development program, FAS will continue to emphasize country and commodity combinations where there is a high pay-off from the expenditure of Federal funds. The FAS program is increasingly being focused on developing country markets with strong growth potential.

Another important aspect of our export effort is the P.L. 480 food aid program. Because of the critical food situation in Africa, the Administration is requesting a supplemental program increase of $201 million for food donations under Title II in FY 1985. With the supplemental, the amount of P.L. 480 funding to be made available in FY 1985 will exceed $2.0 billion and result in an estimated programmed tonnage of 8.5 million metric tons (MMT). In addition to the quantity provided under P.L. 480, the President has also made available 300,000 tons of wheat from the Food Security Wheat Reserve to assist countries experiencing major food emergencies, and we have sold on a competitive bid basis $90 million of CCC commodities to African countries. For FY 1986, we will be requesting a P.L. 480 program level of nearly $1.7 billion, which will finance the shipment of 6.9 MMT. This request is slightly higher than the P.L. 480 request in the President's original 1985 budget submission.

Small Community and Rural Development

The FY 1986 budget proposes significant reductions in this area, reflecting the intent of the Administration to reduce the Federal deficit and dependence on the Federal Government as a provider of credit. However, the Department will continue to incur significant outlays for subsidy costs and losses on loans made in prior years. Reductions in new loan activity will permit a reduction in staffing primarily within FmHA.

Farm Credit. Guaranteed farm operating loans will be increased from $650 million in FY 1985 to $3 billion in FY 1986. This increase will more than offset a reduction in insured loans from $1,920 million in FY 1985 to $400 million in FY 1986. The shift in emphasis to guaranteed loans will allow the FmHA to concentrate on the servicing of its existing borrowers. It will also provide for greater participation by the private sector in the financing of farm operating expenses.

Legislation will be proposed to limit emergency disaster loans to those areas where federal crop insurance is not available, and to eliminate the interest rate subsidy on farm operating loans. New lending under farm ownership loan program and other real estate loan programs will be terminated.

Rural Housing. These programs will be terminated in FY 1986 except for $30 million in loans for repairs to low-income housing financed by FmHA and $50 million in rental assistance payments. In the future, housing assistance for rural areas will be obtained through the Department of Housing and Urban Development (HUD). Beginning in FY 1988, HUD will earmark 50 percent of its Section 8 housing subsidy funds for rural areas.

Rural Community Facilities. Water and waste disposal loans will be reduced from $340 million in FY 1985 to $50 million in FY 1986, and grants will be reduced from $117 million to $25 million. These funds will be restricted to very low-income communities experiencing health and safety hazards and not otherwise able to obtain financing.

The community facility and business and industry loan programs will be terminated.

Beginning in FY 1986, HUD will increase its earmark of community development block grants for rural areas from 30 percent to 40 percent to offset the reduction in FmHA's programs.

Rural Utilities. Federal participation in the Rural Electrification Administration programs will be phased out by FY 1990. For FY 1986, the Rural Electrification and Telephone programs will be reduced to $1.1 billion from a level of $2.6 billion in FY 1985. Legislation will be proposed to increase interest rates, restrain eligibility to the financially weaker borrowers, and bring the programs on-budget.

Crop Insurance. Legislation will be proposed to provide for the phase out over the next five years of all Federal costs for operating the crop insurance program. These costs, including administrative expenses and premium subsidies, will be incorporated in the premium rate structure paid by participating producers. For FY 1986, under such legislation, Federal Crop Insurance Corporation will require appropriations of $164.3 million for administrative expenses, which compares to $239.2 million required for FY 1986 under current legislation and $198.6 million estimated for FY 1985. Correspondingly, FCIC will require $92.0 million in premium subsidies for FY 1986 under the proposed legislation, which compares to $135.0 million for FY 1986 under current legislation and $110.0 million estimated for FY 1985.

We are also proposing a supplemental appropriation for subscription of the remaining $50 million in authorized capital stock. Without prompt action on the supplemental request, payment of indemnities could be delayed this spring.

Soil and Water Conservation

Funding and staffing for the Soil Conservation Service would be reduced to about 33 percent of current levels in FY 1987 and beyond. Essential technical assistance and soil survey activities would be continued. Assistance to watershed projects and to resource, conservation and development districts would be discontinued. No new financial assistance would be committed under the agricultural conservation program or other conservation financial assistance programs.

While the FY 1986 program and budget proposal is driven primarily by fiscal policy considerations, it also reflects: 1) the outlook that the economic incentives to devote marginal, erosion-prone land to row crops will be lessened once the Administration's new farm legislation is enacted; 2) the general policy that Federal programs of financial assistance to individuals and state and local units of government should be reduced, especially in those cases where economic incentives or existing non-federal institutions might come more significantly into play in the absence of current levels of Federal assistance; and 3) the general recommendation from the Grace Commission that major economies could be achieved by limiting Federal staffing in conservation district offices.

Research and Extension

The Department continues to place a high priority on research and extension activities. However, as fiscal constraints have tightened, we must accept the need to reduce some lower priority programs and make management savings even within the research and extension area.

We are proposing a very small decrease in the budget of the Agricultural Research Service. This is composed of management savings, partially offset by program increases in a few of the higher priority areas. Most of the Cooperative State Research Service formula programs will be straightlined at the FY 1985 appropriations level. Special Research Grants and the Animal Health and Disease Formula funding are being eliminated. In many cases, the research problems addressed by these two programs are also addressed by other ongoing programs.

The proposal for the Extension Service budget also reflects the need to fund only the highest priority programs. All earmarked programs are proposed for termination. While many of these programs have been successful, we must simply find ways to reduce Federal spending.

Economics and Statistics

The Department continues to place high priority on maintaining the integrity and coverage of agricultural statistics and economic analysis programs. Timely and accurate statistics and economic analysis are critical for the effective management of many Departmental programs and for informed decision-making by both the Administration and the Congress. Farmers and other users also rely on accurate data and analysis in managing their operations.

Two small but important initiatives are included for FY 1986. The first would expand our farm labor survey from an annual to quarterly basis to improve the reliability of this data for all users. The second would enhance our efficiency in the preparation of crop and livestock reports.

Marketing and Inspection Services

Last year, I reported that the Department was involved in an emergency program to eradicate a serious outbreak of avian influenza in Pennsylvania which was threatening the entire U.S. poultry industry. Our efforts, which were coordinated and carried out by the Animal and Plant Health Inspection Service, have been successful and have allowed us to lift the general quarantine in Pennsylvania in October 1984. While we have spent more than $64 million of CCC emergency funds so far, our activities in FY 1985 will be limited to surveillance only. In addition, the Department has spent slightly over $1.0 million on eradication of grasshoppers and citrus canker.

For FY 1986, we are proposing a $14.9 million reduction in the brucellosis program. The purpose is to phase down the Federal role without sacrificing the goal of nationwide eradication. We intend to accomplish this through a more disciplined approach that will require highly infected states to submit detailed plans of action and to contribute a greater share of program financing. Once total eradication has been achieved, we intend to maintain a surveillance role only.

We are pleased to report the establishment of the screwworm barrier and quarantine line in Southern Mexico. Maintenance of this barrier will ensure a high degree of protection to the United States and Mexico against future screwworm reinfestations. Furthermore, it will enable the Department to reduce screwworm funding by $8.2 million in FY 1986.

We are also proposing to reduce or phase out the Federal Government's involvement in several pest and disease control programs in cases where the states or industry have the capability of conducting the programs, or where technology is not currently available to prevent the spread of the pest. Programs in this category include animal welfare, witchweed, and imported fire ant. In addition, the budget proposes new legislation to authorize the Department to charge user fees for certain activities which benefit a small and identifiable group of users. These activities include the certification of plants and animals for export, the quarantining of animals being imported, and the veterinary biologics program, and will provide annual savings of $12.3 million.

Our request for the Food Safety and Inspection Service reflects a continued emphasis on management efficiencies and new inspection techniques. These efforts will allow us to assure a safe and wholesome meat and poultry supply without increased funding or staffing levels.

Legislation to provide for recovery of meat and poultry inspection costs through user charges is included in our proposal. Beginning in FY 1986, one-third of total program funds would be derived from fees. By FY 1988, the program would be fully fee-supported. Direct deposit of fees to the Treasury and continuation of an annual appropriation is proposed as a means of avoiding any perception that industry is directly employing our inspectors. In no way would our proposal compromise the independence of inspection. Enactment of another proposal would enhance our ability to take immediate action to withdraw inspection from plants with serious violations.

We are again proposing legislation which would permit us to respond more efficiently to the inspection needs of the meat and poultry processing industry. In the years since enactment of legislation establishing our meat and poultry inspection programs, significant technological advances have occurred in food processing techniques and our ability to monitor those operations. Recognizing the impact of those changes on conditions in the industry, we are proposing legislation to permit flexibility in scheduling processing inspection. We estimate that our proposal will save about $45 million over the FY 1986-1990 period.

During the past four years, we have cooperated in successfully implementing user charges to recover marketing program costs from those benefiting from the services. For example, user fee programs of the Agricultural Marketing Service (AMS) now represent 75 percent of the agency's funding versus roughly 50 percent in 1981. Additional opportunities to provide services on a user fee basis still exist in certain marketing and inspection programs. Our FY 1986 request for AMS includes a $23 million shift from appropriated funds to user fees. User fee collections for the Federal Grain Inspection Service, the Agricultural Cooperative Service and the Packers and Stockyards Administration will fund $8.6 million of activities which are currently funded through direct appropriations.

Domestic Food Assistance Programs

We are stressing management efficiency and effectiveness in our domestic food assistance programs. There have been improvements in the last four years. The number of fraud claims established in the Food Stamp Program have increased substantially and the amounts collected have nearly quadrupled. Income verification has been instituted in the school food programs and there have been few complaints from schools or individuals.

The budget for the Food and Consumer Services Programs for FY 1986 is $18.3 billion, about $281 million less than the current estimate for FY 1985.

Food Stamp Program. For FY 1985, a $318.9 million supplemental is requested for the Food Stamp Program to allow for full payments to all eligible recipients for the full year. This will increase the current FY 1985 funding level from $11.43 billion to $11.74 billion.

A FY 1986 budget of $11.86 million is requested for the Food Stamp Program. This represents a net increase of $113 million from the proposed 1985 funding level of $11.74 billion. Benefits to households will increase due to a projected rise in the value of the Thrifty Food Plan. A slight reduction in participation is expected based on a lower projected level of unemployment. Also, the budget anticipates about $56 million in savings during FY 1986 due to two proposed changes.

First, the Administration is proposing to freeze funds for state administrative expenses at the FY 1985 level and to change the method of providing Federal administrative support to a fixed grant for state administration costs. Currently, the Federal Government pays the states for approximately 50 percent of all allowable administrative expenses. The second proposed change is to require states to conduct a Community Work Experience Program. Such a program will give employable food stamp recipients valuable work experience, as well as providing millions of dollars of needed work to local communities.

Nutrition Assistance to Puerto Rico. A block grant of $825 million for Nutrition Assistance to Puerto Rico is requested at the same level of funding as FY 1985.

Child Nutrition Programs. The FY 1986 budget for the Child Nutrition Programs is $3.8 billion, $381 million less than the current estimate for FY 1985.

Savings will result primarily from a proposal to eliminate the subsidy for meals served in schools and child care programs to children from households with an income level over 185 percent of poverty. The level of the commodity purchases for the Child Nutrition Programs will be protected by a companion proposal to restructure the cash and commodity subsidy rates for the free and reduced price meals.

Moreover, as proposed in many Federal programs, the 1986 cost-of-living adjustment will not be made.

Supplemental Food Programs. In FY 1985, the $1.44 billion in funds available for the Women, Infants, and Children (WIC) Program will provide assistance to approximately 3 million participants per month.

In FY 1986, the Administration's WIC funding request of $1.48 billion will continue to provide assistance to about three million participants per month. The proposed FY 1986 funding level of $34 million for the Commodity Supplemental Food Program will also continue to support the FY 1985 participation level of about 148,000 people per month.

Other Domestic Food Assistance Programs. For FY 1986, the Administration is proposing a program level of $174.6 million for the Food Donations Program, which provides commodities to Indian Reservations and to the Nutrition Programs for the Elderly. This is a slight increase above the FY 1985 level to allow for food cost inflation in the Indian Program. No increase in participation is expected in the Special Milk Program which will be funded at $17.7 million in FY 1986.

We are continuing to provide additional support to many of the food assistance programs in the form of donated commodities. The donated commodities are those acquired either through our Section 32 surplus removal efforts or through the price support operations of the CCC. The commodities are given to schools, charitable institutions, soup kitchens or food banks. Since the Temporary

Emergency Food Assistance Program legislation authorization will expire, the Department has not requested administrative funding for the program.

Human Nutrition Information Service. The budget request is $13.4 million, $5.9 million above the FY 1985 level. The additional funding will be used to conduct the Nationwide Food Consumption Survey, which is conducted at 10-year intervals.

Departmental Management and Administration.

The FY 1986 budget proposes an aggregate reduction in funding of over 11 percent for the various offices in the Department concerned with management and administration. These offices have been subject to a reduction in funding based on the government-wide management and administrative savings initiative.

Management Initiatives

As part of its program to reduce the deficit, the Administration has initiated government-wide management improvement efforts. The Deficit Reduction Act of 1984 proposed reduction targets for motor vehicles, travel and transportation, public affairs, printing and consultant services. USDA has accepted its responsibility to achieve these savings and is proposing reductions of $49.2 million in FY 1985. The FY 1986 budget reflects savings of $86.6 million to be achieved through efforts to streamline administrative and management functions.

We have developed a strategy for improving program management and administrative support in USDA. We are committed to a program to modernize and improve management structures, systems, and methods.

The plan addresses five key resource areas -- the dollars, information, structure, people, and the management process itself. We will be working with the Congress, USDA employees, constituent groups, and policy leaders to develop and implement specific actions and programs.

Mr. Chairman, this concludes my formal statement. I appreciate the opportunity to present the Department's FY 1986 budget proposal to the Committee and look forward to working with you.

I will be happy to address any specific concerns that you have.

BIOGRAPHICAL SKETCH OF RANDY M. RUSSELL

On June 2, 1984, Randy Russell was appointed by Secretary of Agriculture John Block as Deputy Assistant Secretary for Economics.

Prior to joining the Department of Agriculture, Randy was vice president for Agriculture and Trade at the National Council of Farmer Cooperatives.

Before joining the National Council, Randy was director of government relations for the Pillsbury Co. in Minneapolis, MN. His principle function with Pillsbury was in the area of liaison between the U.S. Department of Agriculture and the Agri-Products Division within Pillsbury.

Randy earlier worked as an assistant to the Secretary of Agriculture, John Block. During this period, he served as 1981 Farm Bill Coordinator for Secretary Block. Later he joined Assistant Secretary William Lesher's office as a staff economist.

Randy has previously served as an agricultural adviser to Senator Rudy Boschwitz from Minnesota. His responsibilties included briefing the Senator on all legislation that came before the Senate Agriculture Committee as well as representing the Senator in meetings with farm groups around the State of Minnesota.

Randy has worked as an economist for the Senate Agriculture Committee where his job involved analyzing legislation involving CCC price support programs, rural development policy, and water resources.

Randy began his career as an economist for the Economic Research Service of the U.S. Department of Agriculture.

Born in Virginia, Russell attended George Mason University where he did both his undergraduate and graduate studies in economics. During his graduate studies, Russell focused on international trade policy analysis.

He and his wife Lisa, along with their three children, make their home in Springfield, VA.

STATEMENT OF SENATOR ANDREWS

Senator COCHRAN. We have Steve Dewhurst, the Department's budget officer, with the Secretary, and others he may want to present. We welcome all of you.

Before you proceed, let me recognize Senator Andrews for any statements or questions he might have.

Senator ANDREWS. Thank you, Mr. Chairman. I appreciate that. I am moving over to a couple of other subcommittees.

NEED FOR ACCURATE INFORMATION

Mr. Secretary, as you know, I totally agree with the statement the chairman, my good friend, Senator Cochran, has just pointed out. One of the things that concerns me, however, is the need for accuracy in the information we are getting.

Certainly, in the farm sector, with the crisis we are faced with out there, those of us who were involved in the filibuster, and later in the amendments to the aid bill, pointed this out. We wish the President was receiving more accurate information, because if he was, he wouldn't be saying some of the things that he was saying.

In a recent article in the Post, we find out that President Reagan, who has threatened to veto farm credit legislation when it reaches his desk this week, will have sparse information on which to base his decision.

It goes on to say that, "None of the 400 economists in the Agriculture Department's Economic Research Service has been assigned full time to study the issue. Most of the analysis was left to a team of eight professors at Iowa State."

Now, that may just be journalistic hyperbole, Mr. Secretary, but, sitting upstairs on the Budget Committee as I do, when we went to those hearings yesterday, I was given an analysis. This analysis shows the farm bill changes that we made in the House and the Senate. The farm bill changes are referred to by the President as a "bust the budget item," of some $7 billion.

Mr. Secretary, this analysis, given to us as members of the Senate Budget Committee, shows that, yes, indeed, in 1985 there will be an impact amounting to $7 billion. We recover that $7 billion in 1986, Mr. Secretary. That makes that part revenue neutral. Underneath, it shows that we have an impact of $120 million in interest but we recover $400 million in interest in calendar year 1986.

Now, Mr. Secretary, when we looked at what we did in those amendments, which many of us on this subcommittee supported—and I wish more would have, and perhaps would have if we had gotten the right story out—essentially, we shifted some of the load off Farmers Home onto the banks, not in a bank bailout.

Right now, many farmers are being told, "Go to Farmers Home. You will get a low-interest loan, 8 percent, because you have problems." The Government pays all the write-down of that interest.

What that amendment did, Mr. Secretary, and what these budget figures that I received yesterday show, is that the Government shared the interest costs if borrowers stayed at the bank window. We are talking about a 4-percent drawdown, 2 percent paid for by the bank, 2 percent by the Federal Government.

Why, Mr. Secretary, is the President getting such sparse information? And why, Mr. Secretary, if what the President says is true, do I, as a member of the Senate Budget Committee, get from the administration the fact that the $7 billion cost will be recovered in total next year?

RESPONSE TO QUESTION ABOUT ANALYSIS

Secretary BLOCK. Mr. Chairman, if I may, I will respond rather briefly to Senator Andrews and then provide the testimony. Would that be appropriate?

Senator COCHRAN. That will be fine, thank you.

Secretary BLOCK. First of all, in response to the question about the analysis. I would like to have Randy Russell, who has served as Deputy Assistant Secretary for Economics—he is now Executive Assistant to me—give this response, because he has had the responsibility of management of the staff that is responsible for that analysis.

Mr. RUSSELL. Senator Andrews, we have a credit section within the Economic Research Service that has about 10 agricultural economists, who are studying the credit conditions that exist. I would just have to say that that article is inaccurate.

I have talked with the Administrator of the Economic Research Service. He feels that, in fact, some of the best data that is coming out on the farm financial situation is coming from the Economic Research Service. They prepared information as early as January 1985, which shows debt-to-asset ratios for family farm operators that are facing financial problems.

We can certainly provide that information to you as part of the hearing record.

Senator ANDREWS. It would be helpful.

[The information follows:]

THE CURRENT FINANCIAL CONDITION OF FARMERS AND FARM LENDERS

ABSTRACT

The financial condition of many farmers and farm lenders has deteriorated over the last 4 years. Land values declined by as much as 28 percent between their 1981 peak and April 1984 in some midwestern States. At current levels of interest rates and farm returns, farmers with debt amounting to over 40 percent of their total assets generally face cash flow problems and financial stress. Among the 679,000 family-size commercial farms on January 1, 1985, 229,000 farms, owing over 46 percent of all farm debt, had financial problems ranging from difficulty servicing debts to technical insolvency.

Keywords: Asset, bank, credit, cash flow, debt, Farm Credit System, farm income, Farmers Home Administration, financial stress, insolvency, insurance company

PREFACE

Financial conditions in the farm sector are likely to be important as Congress considers new farm legislation in 1985. The financial stress being felt by many farmers could play a major role in shaping the next omnibus farm bill. Financial stress--its causes, extent, and implications--are described in this report.

This analysis was coordinated by David H. Harrington and Jerome M. Stam of the National Economics Division. Major sections were contributed by George Amols, Kenneth Baum, Annette Clauson, Stephen Gabriel, Linwood Hoffman, James Johnson, Mark Lieblich, James Ryan, and Vernon Starr. Kathryn Lipton and Lloyd Teigen reviewed the manuscript and provided editorial suggestions.

OTHER REPORTS ON FARM LEGISLATION

Other USDA reports providing background for 1985 farm bill discussions deal with the major program commodities, the farm industries that produce them, and the farm programs under which they are produced. These commodity papers are available from EMS Information, Room 0054-S, USDA, Washington, D.C. 20250, (202) 447-7255. They include Honey (AIB-465), Wool and Mohair (AIB-466), Wheat (AIB-467), Tobacco (AIB-468), Peanuts (AIB-469), Rice (AIB-470), Corn (AIB-471), Soybeans (AIB-472), Oats (AIB-473), Dairy (AIB-474), Sorghum (AIB-475), Cotton (AIB-476), Barley (AIB-477), and Sugar (AIB-478).

Background reports are also available on Federal Credit Programs for Agriculture (AIB-483), the History of Agricultural Price Support and Adjustment Programs, 1933-84 (AIB-485), Foreign Exchange Constraints to Trade and Development (FAER-209); Financial Constraints to Trade Growth: The World Debt Crisis and Its Aftermath (FAER-211), Possible Economic Consequences of Reverting to Permanent Legislation or Eliminating Price and Income Supports (AER-526), and the Impacts of Policy on U.S. Agricultural Trade (ERS Staff Report No. AGES840802).

SUMMARY

Financial conditions of many farmers and farm lenders have deteriorated significantly over the past 4 years. Large supplies and weak demand have squeezed farm income and reduced the net worth of farmers. Many farmers face insufficient cash flow, declining asset values, problems of access to credit, and forced liquidation, foreclosure, and bankruptcy. This financial stress is transmitted to farm lenders through loan delinquencies and losses, inadequate security for loans, and in some cases, insolvency and failure of lending institutions.

Problems of farmers and lenders stem from a combination of lower current incomes

in farming, prospects for slow income growth, and a drop in the value of farmers' assets as land prices adjust to these market expectations.

Sources of the Problem

The current distress among farmers and farm lenders is rooted in the inflationary decade of the 1970's and adjustments from the excesses of that period to sharply different economic conditions in the 1980's. Throughout the 1970's, farmers faced rapidly expanding exports, accelerating inflation, and low to negative real interest rates (the nominal interest rate minus the inflation rate). Farmers responded by borrowing heavily to invest in new capital equipment, to adopt new production technologies, and to purchase increasingly expensive farmland. Farm debt rose an average of more than 10 percent a year. Yet land values rose even faster, providing the economic rationale as well as the security for farmers and lenders to expand and roll over debt. Debt/asset ratios of farms declined over the 1970's.

By the early 1980's, the factors that had given rise to the expansion had reversed direction. Worldwide recession weakened international markets; the value of the dollar rose rapidly against major currencies, further dampening export demand; and inflation was slowed by stringent control of monetary growth. Real interest rates, which had been low or negative throughout the 1970's, jumped to unprecedented levels of 8 to 10 percent. Farm commodities in foreign and domestic markets were too plentiful to sustain the prices that had prevailed during the 1970's, causing commodity prices and farmers' incomes to drop significantly. Land values, which depend on both current farm income and prospects for future income growth, also began to decline. The debt levels that some farmers had assumed over the 1970's were no longer sustainable. Farmers whose solvency depended on continuously rising land values or who pursued an aggressive expansion strategy were pushed toward insolvency. Moreover, even those farmers who pursued more cautious financial strategies in the 1970's but who suffered from the 1980 or 1983 droughts or other natural disasters are now under financial stress.

How Serious is the Problem?

The extent to which farmers face financial problems can be gauged by changes in their asset values, debt commitments, and farm cash income positions. Asset values continue to decline in many areas. Farm financial situations as measured by debt/asset ratios--debt as a percentage of assets--continue to worsen, and farms with significant debts continue to have cash shortfalls that require them to refinance, stretch out their loans, or liquidate some of their assets.

Asset Values

Farmland prices peaked in 1981 after three decades of uninterrupted increases. By April 1984, farmland prices had dropped 8 percent nationwide, and by as much as 28 percent in parts of the Corn Belt and Upper Midwest. Land values continued to drop throughout the Midwest in 1984, and probably will decline further in 1985. Land values are now back to the levels of the mid-1970's in those areas. Many of the farmers who purchased land or started farming in the late 1970's now have debts exceeding the value of their assets.

Farm Financial Situations

Farmers' equity and lenders' security are reflected by the debt/asset ratio and net worth of farm businesses. Cash flow indicates the amount of shortrun net cash income from all sources that a farm can use to service debts after meeting family living needs; that is, it indicates repayment capacity of the farm business.

Available data on the severity of farm financial problems, summarized in summary table 1 and summary figure 1, suggest the following:

- o At current interest rates and levels of net returns in farming, farms with debt/asset ratios of over 40 percent are likely experiencing cash shortfalls. Farms with debt/asset ratios of over 70 percent are almost certain to have serious cash shortfalls.

- Some 243,000 farms (11.1 percent of all farms) have debt/asset ratios from 40 to 70 percent. These farms are termed,"highly leveraged," tend to have serious cash shortfalls, and owe one-third of all farm debt.

- As many as 143,000 farms have debt/asset ratios above 70 percent. These "very highly leveraged" farms make up only 6.6 percent of all farms, but they owe almost one-fourth of all farm debt.

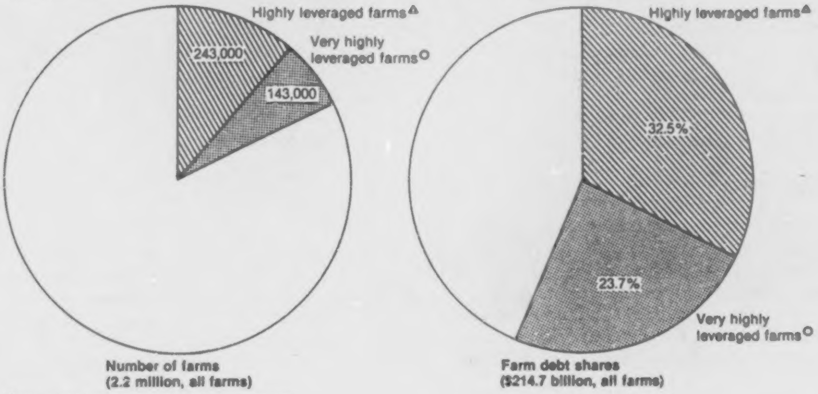
Not all of the farms in the highly and very highly leveraged categories are under serious financial stress. Farms with less than $50,000 in sales obtain much of their income from off-farm sources, and often qualify for and repay their loans on the basis of off-farm income. Very large farms with over $500,000 in sales tend to be highly industrialized specialty operations (feedlots, sod farms, nurseries, orchards, and poultry operations) and typically operate with high debt/asset ratios. Most of these farms have positive cash flows.

Summary table 1--Distribution of farms by debt/asset ratio and sales class, January 1984

Sales class	Highly leveraged (debt/asset ratios of 40 to 70 percent)			Very highly leveraged (debt/asset ratios over 70 percent)		
	Percent of class	Number of farms	Percent of debt	Percent of class	Number of farms	Percent of debt
$500,000 and over	17.4	5,200	4.8	15.3	4,500	4.9
$250,000-499,999	19.0	17,600	5.1	12.6	11,000	4.2
$100,000-249,999	18.1	52,800	10.5	9.2	26,400	5.9
$50,000-99,999	14.7	44,000	6.2	8.7	26,400	3.9
Less than $50,000	8.3	123,200	5.8	5.0	74,800	4.8
All farms	11.1	243,000	32.5	6.6	143,000	23.7

Summary Figure 1

Number and Indebtedness of Farms by Ratio of Debt to Assets, January 1984



△Farms with debt equaling 40 to 70 percent of assets.
○Farms with debt equaling more than 70 percent of assets.

The remaining farms, with sales of $50,000 to $500,000 annually, are the mainstream of family-size commercial agriculture, and the focus of the current concern about farm financial conditions. In 1984, of these 679,000 family-size commercial farms:

- Over one-quarter faced some degree of financial stress--from needing to stretch out loans to technical insolvency. These farms owed 36 percent of all farm debt.

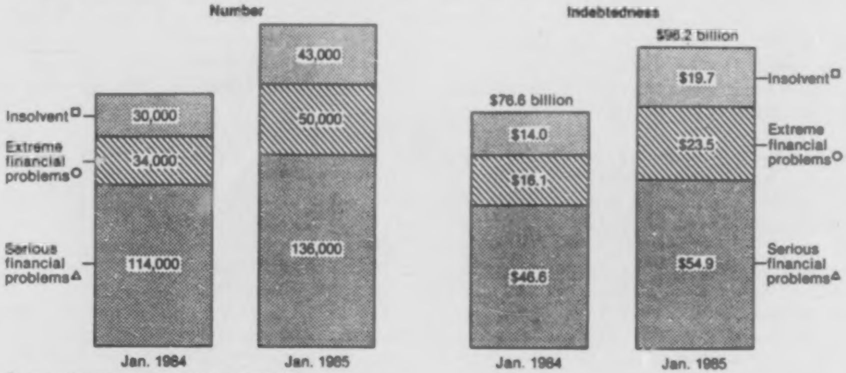
- An estimated 30,000 farms were insolvent, having debt/asset ratios over 100 percent. These farms owed 6.5 percent of all farm debt.
- Another 34,000 farms, owing 7.5 percent of the debt, had debt/asset ratios between 70 and 100 percent. Those farms are rapidly moving toward insolvency.
- About 114,000 farms were highly leveraged, facing serious financial problems. These farms owed 22 percent of all farm debt.

If the situation in early 1984 is extended to early 1985, the available data suggest that one-third of all family-size commercial farms, owing almost one-half of all farm debt, will have some degree of financial difficulty (summary table 2 and summary fig. 2).

- 43,000 of the farms, owing 10 percent of the debt, will owe more than their assets are worth. They will be technically insolvent.

Summary Figure 2

Number and Indebtedness of Family-Commercial Farms Under Financial Stress, January, 1984 and 1985



△Farms with debt equaling 40 to 70 percent of assets.
○Farms with debt equaling 70 to 100 percent of assets.
□Farms with debt greater than assets.

Summary table 2--Current financial stress among family-size commercial farms: Number and proportion of farms and proportion of debt by debt/asset ratio 1/

Status of loans	Debt/asset ratios	January 1985		Net annual increase, 1984 2/	
		Family-size farms	Proportion of all debt	Family-size farms	Proportion of all debt
Technically insolvent	Over 100 pct.	43,000 (6.3 pct.)	9.3 pct.	+13,000 (+1.9 pct.)	+2.8 pct.
Extreme financial problems	70-100 pct.	50,000 (7.4 pct.)	11.1 pct.	+16,000 (+2.4 pct.)	+3.6 pct.
Serious financial problems	40-70 pct.	136,000 (20.0 pct.)	25.9 pct.	+22,000 (+3.2 pct.)	+4.2 pct.
No apparent financial problems	under 40 pct.	450,000 (66.3 pct.)	17.9 pct.	-51,000 (-7.5 pct.)	-10.6 pct.
All family-size farms		679,000 (100 pct.)	64.2 pct.		

1/ Farms with $50,000 to $500,000 in sales.

2/ Assuming continuation of the economic conditions in 1983, and a further 5-percent national average decline in farmland prices in 1984.

- An additional 50,000 farms, owing 11 percent of the debt, will be moving rapidly toward insolvency.
- As many as 136,000 farms, owing 26 percent of the debt, will have serious financial problems, but will be able to survive a few more unfavorable years.

Farm Lender Situations

The major institutional farm lenders include commercial banks, the Farm Credit System, life insurance companies, and the Farmers Home Administration. The deterioration of farm financial conditions has also seriously affected these lenders.

Commercial banks, holding nearly 20 percent of all farm debt, have experienced sharp increases in delinquencies and loan losses over the past few years. Delinquent loans are up by nearly 20 percent at agricultural banks and are now significantly higher than at nonagricultural banks. Nonaccrual loans, which are more than 90 days overdue and not accruing interest, have nearly doubled to 1.6 percent since December 1982. Agricultural problem banks as defined by the Federal Deposit Insurance Corporation have nearly tripled--to 288--over the past 18 months. Agricultural bank failures increased from 6 in 1983 to 23 in 1984.

The Farm Credit System, which holds over 30 percent of all farm debt, is having severe problems. Ten Production Credit Associations were liquidated in 1984, most of them in the district of the Spokane Federal Intermediate Credit Bank. Other banks in the system are moving to save the Spokane Bank. Loan losses and charge-offs continue high in Production Credit Associations and are now starting to climb in Federal Land Banks.

Life insurance companies, holding 6 percent of all farm debt, indicate that their agricultural loans have recently had much higher rates of delinquency and foreclosure than their nonagricultural loans. Nearly 3 percent of life insurance company farm loans were in foreclosure proceedings in June 1984.

The Farmers Home Administration (FmHA), as the lender of last resort, would be expected to have a loan portfolio with a high rate of delinquency. FmHA holds about 12 percent of all farm debt. Delinquent FmHA debt has increased fivefold over the past 4 years, and now stands at $5.4 billion (21 percent of the outstanding principal). Much of this delinquent FmHA debt is concentrated in the South, with three States--Georgia, Texas, and Mississippi--accounting for nearly one-third of delinquent FmHA debt. FmHA has exercised forbearance to the maximum extent possible. Most FmHA borrowers who discontinue farming do so through choice or unforced procedures. For those who have discontinued through forced procedures, creditors other than FmHA have usually initiated the process.

INTRODUCTION

Financial conditions of many farmers and farm lenders have deteriorated over the past 4 years as the farm economy has experienced a prolonged period of excess supply with persistent pressures on the incomes and net worth of farmers. Many farmers have faced serious cash flow problems over these 4 years. Perhaps of greater significance thus far have been the declines in farm asset values as farmland values have responded to expectations for lower farm incomes and less buoyant growth rates for farm asset values. These changes have weakened farmers' ability to service existing debt. Significant numbers of farmers face problems of continued access to commercial credit or, more seriously, forced liquidation or foreclosure. Other farmers, who may have less serious financial problems, are concerned that further financial stress will put them in the same position. Similarly, many farm lenders face their own stress because of delinquencies, high loan losses, and possible lender failure or reorganization. Nevertheless, the majority of farms do not appear to have serious problems stemming from use of debt, and the majority of farm lenders are in sound financial condition.

This report describes and assesses the financial problems facing farmers, farm asset owners, and farm lenders. The focus is on the extent and seriousness of the problems, how they arose, and the likely consequences of continued financial stress. Recent financial performance of the farm sector is described in terms of net incomes, farmland values, and the outlook for the next few years.

The indicators used to gauge the problems of farmers and farm asset owners include: declining asset values; increasing debt/asset ratios; insufficient cash flows to service existing debt; maintaining creditworthiness and access to credit; and bankruptcies, foreclosures, and forced liquidations.

Problems of farm lenders that stem from the farm financial conditions are discussed in terms of loan delinquencies, security for loans, loan losses and charge-offs, and lender distress and failures. The likely financial impacts if the current levels of farm borrower stress continue over the next few years are also assessed.

ORIGINS OF CURRENT PROBLEMS

Current financial distress in the farm sector did not develop suddenly. It is strongly rooted in events of the 1970's when farmers reacted to expanding export markets, accelerating inflation, and low real interest rates (nominal interest rate minus the inflation rate) by investing heavily in land and equipment and expanding the Nation's agricultural production capacity by nearly 20 percent.

In the early 1980's, each of these elements abruptly reversed direction and farmers were confronted by excess capacity relative to a weakened export demand, slowing inflation caused by stringent control of monetary growth, and unprecedented high real interest rates stemming from the monetary policies necessary to dampen inflation.

The 1970's

Growth in Foreign Demand

In the early 1970's, the U.S. dollar was first devalued, then allowed to float relative to other currencies. The dollar declined in value relative to other currencies throughout the 1970's. The lower value of the U.S. dollar in international exchange stimulated foreign demand for U.S. agricultural products. At nearly the same time, centrally planned and third world countries enjoyed accelerated economic growth while demand for better diets outpaced the capacity of their own farmers. They rapidly expanded imports of feed grains, food grains, oilseeds, and livestock feeds to improve the diets of their people and assist in their agricultural development. U.S. stocks were drawn down to low levels by the rapid increase in effective demand in the early 1970's. Production shortfalls in several parts of the world led to a further apparent increase in the export demand for U.S. farm products. The volume of farm exports nearly tripled from 1970 to 1981, growing at a compound rate of over 8 percent per year from 64 million metric tons to 163 million metric tons. As a proportion of total farm marketings, farm exports grew from 14.4 percent to 29.6 percent over the same period.

The increases in farm prices and incomes encouraged many farmers to expand their operations and also attracted new farmers and investors into agriculture.

Accelerating Inflation

Accelerating inflation in 1970's had an important effect on agriculture. Farmland values rose faster than the rate of inflation, making land a superior hedge against inflation. Farmers and other farmland owners enjoyed large capital gains from land value appreciation that far exceeded their net cash returns from farming. The rapid rise in the value of farmland provided both the incentive to invest, and to some extent, the means to invest, because lenders felt that rising land values would provide adequate security for loans with relatively small downpayments. Furthermore, as expected returns from capital gains increased, farmers and investors were induced to bid more for land. However, farmers who purchased land saw their short-term cash flow positions deteriorate because the net return to newly purchased land was not sufficient to meet the interest and principal commitments on it. By the late 1970's, some farmers were forced to "monetize" their capital gains on farmland by borrowing against them to refinance recurrent shortfalls in cash flow.

Low Real Interest Rates

While interest rates fluctuated with the rate of inflation during the 1970's, the real interest rate remained low and even fell to zero or below in 1974 and 1975 (fig. 1). Low real interest rates provided strong incentives to invest in farmland and capital equipment throughout the 1970's. Farmers greatly expanded their use of credit--more than 10 percent per year. Rapid increases in farmland values (up to 16 percent per year), significantly exceeding the inflation rate, provided the incentive to invest and the collateral to do so. Interest payments for the sector increased sixfold from $3.8 billion in 1970 to $19.1 billion in 1981. From 1970 to 1975, farmers had on average approximately $6 in net farm income (after interest and other expenses were paid) for every $1 of interest paid. In the 1981-83, they had only $1 of net farm income for each $1 of interest paid.

Reversals of the 1980's

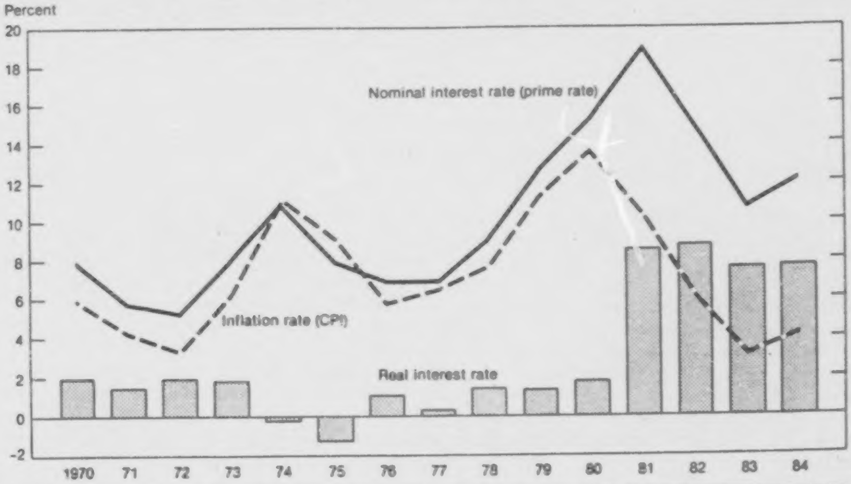
Beginning in 1980 and 1981, all three elements that were driving the buoyant expansion of the 1970's abruptly reversed direction. Exports peaked in 1981, declined by 15 percent in 1982, and held steady in 1983. At the same time, a recession weakened domestic demand. Land values peaked in 1981 and began a decline that continues nationwide and has been most significant in the North Central States. Real interest rates, which had averaged around 1 to 2 percent over the 1970's, abruptly rose to approximately 8 percent.

Underlying Causes

The factors underlying these reversals included worldwide recession and mounting loan problems of developing countries which dampened foreign demand, and a combination of expansionary fiscal and restrictive monetary policies in the United States. The combination of expansionary fiscal policy (tax reductions and Government deficits) and restrictive monetary policy (control of growth of the money supply and allowing interest rates to seek market-clearing levels) had three effects to which agriculture has been especially sensitive. First, inflation was rapidly dampened. Second, very high real interest rates resulted. Third, because of the first two effects, foreign capital was attracted into the United States which raised the value of the dollar in foreign exchange. The combined effects upon the farm sector were to end the rapid climb of most farm production costs but to greatly increase interest costs as a proportion of farm incomes, to further depress foreign and domestic demand for U.S. agricultural products, to reduce prices received for agricultural commodities to their support levels, and to rapidly take the steam out of farmland values.

Figure 1

Inflation, Nominal Interest Rates, and Real Interest Rates, 1970-1984



Adjustment Difficulties

Adjustment by the farm sector to these changed economic conditions was made more difficult by the expansion that took place in the 1970's. In particular:

- Production capacity far outstripped domestic market demand, making agriculture more dependent on export markets and, hence, more vulnerable to the effects of macroeconomic and trade policies.
- For a significant number of farmers, debts that were taken on throughout the 1970's could not be serviced out of the incomes prevailing in 1981 through 1984. Debt continued to increase through 1982 as many farmers borrowed more to weather the lower prices.
- Debt considered adequately secured in 1980 may no longer be so, because farmland values failed to rise as expected, and have dropped by as much as 28 percent in some Corn Belt States.

The abrupt turnaround caught many farmers and lenders in inflexible leverage positions, which made it difficult for them to adjust to the changed economic climate.

Other Changes in the Financial Climate

Several other changes in financial conditions have occurred in the early 1980's that exacerbate the financial stress problems. In addition to lower net incomes and higher debt loads and interest obligations, there were other forces at play which compounded farmers' and lenders' financial problems.

More Volatile Interest Rates. With the October 1979 change in Federal Reserve System policy to one of targeting monetary growth and letting interest rates seek market-clearing levels, interest rates have become more volatile. With the deregulation of financial institutions and the involvement of many rural banks in national money markets, many more farm borrowers have been exposed to the higher and more volatile interest rates of the national financial markets.

Reduced Liquidity of Farms. Larger proportions of farm assets are now in the form of fixed capital items (land and machinery), and smaller proportions are in more liquid items (stored crops, financial assets, and livestock). This means that, for many farms, reducing debt cannot be accomplished by selling relatively liquid assets, but will require selling illiquid, fixed investments like land or machinery.

Shortened Loan Maturities. Between 1970 and 1983, the proportion of loans in the nonreal estate category increased from 46.4 percent to 50.3 percent before reverting to 47.7 percent in 1985. These loans typically have shorter maturities than do real estate loans. Further, lenders have shortened maturities on every type of loan to protect themselves from the increased volatility of interest rates.

Collateral Risk. Declining farmland values over the past 3 years have introduced the risk of declining collateral values and have likely limited farmers' ability to stretch out short-term loans.

Limited Refinancing Alternatives. With the prospect of steady or declining asset values and more stringent application of creditworthiness tests by lenders, farmers' alternatives for refinancing cash shortfalls are limited. Lenders are more careful in extending new credit or refinancing credit to farm clients.

More Asset Liquidations. Liquidations of troubled farm assets may have contributed to decreasing farmland and farm asset values in many parts of the country. Resource markets may not be able to absorb more distressed farm assets without further serious price declines.

RECENT PERFORMANCE OF THE FARM SECTOR

Farm sector performance as measured by net farm income, net cash income, and rising land values indicates relatively buoyant conditions in the 1970's followed by relatively depressed conditions in the 1980's.

Net Farm Income

Net farm income after inventory adjustment (which measures the net returns to farm operators from all agricultural production in a year) averaged $23.6 billion in current dollars throughout the 1970's, and $24.3 billion in the 1980's, but inflation eroded nearly half of its purchasing power from the 1970's to the 1980's (table 1). Net farm income in constant dollars dropped from an average of $15.2 billion (1967 dollars) in the 1970's to an average of $8.5 billion (1967 dollars) in the 1980's. Similarly, farm asset values rose in current dollars up to 1981, but then declined slightly. In constant 1967 dollars, farm assets increased in value until 1980 and then dropped to approximately the level of the mid-1970's. Prospects are for flat to declining farm incomes and asset values over the next few years.

Table 1--Net farm income and asset values, 1940-85

Year	Net farm income: Current dollars	Net farm income: 1967 dollars	Farm assets: Current dollars	Farm assets: 1967 dollars
	Billion dollars			
Average:				
1940-49	11.8	20.5	90.3	156.9
1950-59	12.8	15.8	171.5	211.2
1960-69	12.4	12.9	247.4	256.9
1970-79	23.6	15.2	521.9	323.5
1980	21.2	8.6	1,005.5	407.3
1981	31.0	11.4	1,089 8	400.1
1982	22.3	7.7	1,083.5	374.8
1983	16.1	5.4	1,045.2	350.3
1984 1/	29-33	9.4-10.6	1,031.1	332.6
1985 1/	19-24	6.0-7.5	NA	NA

NA = not applicable.
1/ Forecast.
Source: Calculated from (3).

Net Cash Income

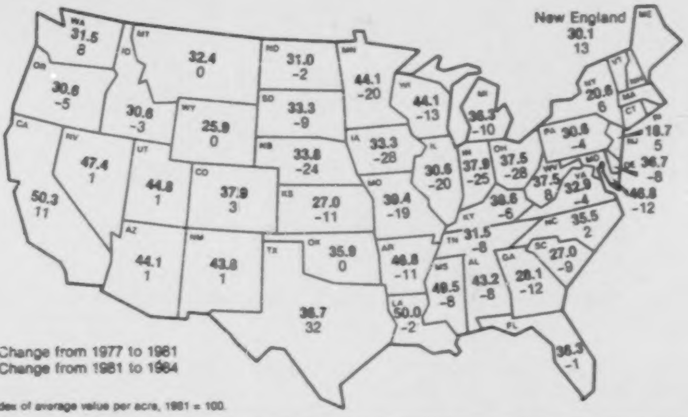
The aggregate performance of the farm sector is less volatile from a net cash income perspective. Net cash income comprises gross cash inflow less gross cash outflow for inputs, wages paid, rents, business taxes, and interest paid. It is the cash balance that is left for household living, debt repayment, reinvestment in the business, and personal and income taxes. It does not make any prior allowances for capital consumption (depreciation) or returns to operator-supplied factors of production (owned land, labor, or equity capital). Net cash income from farming increased fairly steadily over the 1970's, peaking at $38.4 billion in 1979. Net cash incomes from farming fell from 1980 through 1982, but rebounded in 1983 to $44.7 billion, largely in response to reductions of inventories, savings on input costs, and large Government payments associated with the Payment-In-Kind (PIK) program of 1983. The interest-paid component of farm expenditures steadily increased from $3.0 billion in 1970 (16 percent of net cash income from farming) to $21.3 billion in 1982 (75 percent of net cash income), before declining slightly to $20.4 billion in 1983 (46 percent of net cash income).

Farmland Value

Farmland values peaked in 1981 and by April 1984 had dropped as much as 28 percent in some Corn Belt States (fig. 2). Ohio, Iowa, Nebraska, Indiana, and Illinois have experienced the largest declines in farmland values. In these States the land value declines between 1981 and 1984 largely offset the gains made between 1977 and 1981. Many farmers who purchased land or started farming after 1977 have suffered actual capital losses from the prices at which they purchased the land or assets. If they paid above-average prices or financed a high proportion (over 75 percent) of their purchases, their debt/asset ratios may exceed 100 percent at today's land prices. Farmland values continue to drop in most midwestern States. Farmland values are especially sensitive to net farm income prospects and the prospects of inflation in the general economy. Farmland values will likely continue their declines because of the flat to declining prospects for farm income. If inflation is rekindled in the economy there may be some rebound of nominal farmland prices, but a strong run-up of land prices like the one that occurred in the 1970's is not likely to result solely from renewed inflation in the economy. The 1970's increases in land prices stemmed as much from buoyant demand and low real interest rates as from accelerating inflation. Neither looks probable for the rest of the 1980's. Note, however, that a reduction in interest rates might result in some rebound of farmland prices.

Figure 2

Change in Average Value of Farm Real Estate per Acre, 48 Contiguous States, February 1977 - April 1984*


WA 31.5 8
OR 30.6 -5
ID 30.6 -3
MT 32.4 0
WY 25.9 0
ND 31.0 -2
SD 33.3 -9
NB 33.8 -24
MN 44.1 -20
WI 44.1 -13
MI 36.3 -10
IA 33.3 -28
IL 30.6 -20
IN 37.9 -25
OH 37.5 -28
PA 30.8 -4
NY 20.6 6
New England 30.1 13
ME
VT
NH
MA
CT
RI
NJ 18.7 5
DE 36.7 -8
MD 46.8 -12
WV 37.5 8
VA 32.9 -4
KY 38.6 -6
TN 31.5 -8
NC 35.5 2
SC 27.0 -9
GA 28.1 -12
FL 36.3 -1
AL 43.2 -8
MS 49.5 -8
LA 50.0 -2
AR 46.8 -11
MO 30.4 -19
KS 27.0 -11
OK 35.9 0
TX 36.7 32
NM 43.8 1
CO 37.9 3
AZ 44.1 1
UT 44.8 1
NV 47.4 1
CA 50.3 11

Key: 30.6: Change from 1977 to 1981
-20: Change from 1981 to 1984

*Based on index of average value per acre, 1981 = 100.

FINANCIAL STATUS OF FARMERS

The best single measure of the seriousness of farmers' current financial difficulties is given by their debt/asset ratios. However, financial distress is not perfectly reflected by debt/asset ratios. Financial stress is also correlated with size and type of farm. Larger farms tend to rent more land; thus their owned asset base does not fully reflect the strength of the business. Furthermore, certain types of farms, such as nursery and horticultural specialty farms, poultry and egg farms, and feedlots are organized more along industrial lines than are other farms. Their ownership may be more widely spread. They rent a higher proportion of their resources, and a smaller proportion of their costs are committed to asset ownership. These highly industrialized farms can often operate with higher debt/asset ratios and suffer less financial stress than more traditionally organized farms, such as cash grain or dairy farms.

Debt/Asset Ratio

As many as 243,000 farms (11.1 percent of all farms) have debt/asset ratios between 40 and 70 percent, generally indicating serious financial stress. An additional 143,000 farms (6.6 percent) have debt/asset ratios over 70 percent, generally indicating extreme financial stress (table 2).

Table 2--Distribution of farms by debt/asset ratio and sales class, January 1, 1984

Sales class	Highly leveraged (40-70 percent debt/asset ratio)		Very highly leveraged (over 70 percent debt/asset ratio)	
	Percentage of class	Farms	Percentage of class	Farms
	Percent	Number	Percent	Number
$500,000 and over	17.4	5,200	15.3	4,500
$250,000-499,999	19.0	17,600	12.6	11,000
$100,000-249,999	18.1	52,800	9.2	26,400
$50,000-99,999	14.7	44,000	8.7	26,400
$25,000-49,999	9.7	26,400	7.9	22,000
$10,000-24,999	7.9	30,000	4.0	16,400
Less than $10,000	8.1	66,800	4.5	36,400
All farms	11.1	243,000	6.6	143,000

Source: (1).

Farmers in the highest sales classes have the highest debt/asset ratios; 15.3 percent of farms with sales over $500,000 have debt/asset ratios above 70 percent. Some of these farms have extreme financial stress. An additional 17.4 percent of these farms have debt/asset ratios between 40 and 70 percent. Some of these farms may have serious financial stress.

The proportion of highly leveraged and very highly leveraged farms is highest for poultry and egg farms (table 3). Other specialized livestock farms have large proportions of farmers with high and very high financial leverage. Vegetable and melon farms, nurseries, and field crop farms also exhibit high debt/asset ratios. The proportion of all farms in the very highly leveraged category has nearly doubled since January 1980, with dairy farms nearly quadrupling. The proportion of farms in the highly leveraged category increased by 26 percent over the same period.

Table 3--Distribution of farms by debt/asset ratio and type of farm, January 1, 1984

Type of farm	Highly leveraged (40-70 percent debt/asset ratio)		Very highly leveraged (over 70 percent debt/asset ratio)	
	Percentage of class	1980-84 increase	Percentage of class	1980-84 increase
	Percent			
Cash grain	14.2	25	7.6	81
Field crop	11.8	27	8.9	123
Vegetable and melon	17.8	107	6.3	26
Fruit and nut	7.7	31	4.0	111
Nursery	21.7	131	(d)	--
General crop	6.7	-7	4.6	92
General livestock	10.6	47	7.1	163
Dairy	17.8	60	8.7	295
Poultry and egg	17.9	30	17.7	216
Other livestock	12.6	48	9.1	165
All farms	11.1	26	6.6	94

(d) = Data not available due to disclosure rules.
-- = Not applicable.

Source: (1).

The Lake States, Northern Plains, Northeast, and Mountain States have the highest proportions of highly leveraged and very highly leveraged farms (table 4). This is partially explained by the concentration of dairy farms in the Lake States and Northeast and livestock farms in the Mountain States and Northern Plains. The Southeast has suffered extensive drought and poor production conditions for several years, which have no doubt contributed to its high proportion of very highly leveraged farms. The Corn Belt has experienced the largest declines in asset values, yet does not show up as having an above-average proportion of farms with high to very high debt/asset ratios. This may be explained, at least in part, by the greater concentration of cash grain farms, which tend to be in the middle size ranges from $50,000 to $250,000, and by the high proportion of farms with sales less than $50,000--both of which tend to have lower debt/asset ratios.

Table 4--Distribution of farms by debt/asset ratio and region, January 1, 1984

Region	Highly leveraged (40-70 percent debt/asset ratio)	Very highly leveraged (over 70 percent debt/asset ratio)
	Percent	
Northeast	15.9	3.9
Lake States	14.5	8.0
Corn Belt	11.9	5.9
Northern Plains	13.9	8.4
Appalachian	7.2	4.8
Southeast	7.1	7.9
Delta States	7.9	6.5
Southern Plains	9.0	6.9
Mountain States	10.1	9.1
Pacific States	10.3	5.5
United States	11.1	6.6

Source: (1).

Cash Flow

Data from the most recent USDA Farm Expenditure Survey along with off-farm income data were used to estimate the availability and needs for cash income to service debt and meet family living needs. The analysis assumed that all of the net cash operating margin (which does not reflect any prior allocation for capital consumption, nor any return to operator-supplied factors) and all off-farm income would be used to repay debt and provide for family living needs. Debt repayment requirements were conservatively assumed at 5 percent of total outstanding debt. This assumption implies a great deal of past and present forbearance by lenders. It would be consistent with a borrower having his or her debt distributed 75 percent as long-term mortgages with 20 years remaining, and 25 percent as intermediate-term debt with its amortization period extended to 5 years. To the extent that current payback terms are shorter than those assumed here, or that lenders do not extend the assumed degree of forbearance, this analysis may underestimate the cash required for principal repayments.

Off-farm income data were adapted from ERS published sources. 1/ The measure of cash available for family living and debt repayment is a very shortrun measure because no allowance was made to replace capital or to provide for returns to owned assets, operator labor, or management (see app. tables 1 and 2 for complete details of calculations). Family living expenses were assumed to be $20,938, the median family income for nonmetropolitan counties for 1983.

Cash needs and availabilities were calculated by sales class and debt/asset ratio (table 5) and by type of farm and debt/asset ratio (table 6). Cash shortfalls were found for all sizes of farms in the very highly leveraged category and for all farms with sales of less than $100,000. Cash shortfalls became more serious with increased financial leverage, but smaller farms were found to have the largest cash shortfalls (table 5).

1/ Off-farm income estimates by sales class were adapted from (3), and by type of farm from (2).

Table 5--Average shortrun cash availability and needs by sales class and debt/asset ratio, 1983 1/

Item	Sales class and debt/asset ratio					
	Over $500,000			$250,000-499,999		
	0-40 pct.	40-70 pct.	Over 70 pct.	0-40 pct.	40-70 pct.	Over 70 pct.
	Dollars					
Gross farm income	1,027,024	1,056,994	1,141,608	315,025	340,040	337,463
Net cash operating margin	150,677	51,913	(4,450)	57,941	34,624	27,166
Off-farm income	28,603	28,603	28,603	14,610	14,610	14,610
Total cash available	179,280	80,516	24,153	72,551	49,234	41,776
Annual debt repayment	17,858	52,600	59,671	9,674	21,074	26,348
Family living expenses	20,938	20,938	20,938	20,938	20,938	20,938
Total cash needs	38,796	73,538	80,608	30,612	42,012	47,286
Cash surplus or (shortfall)	140,484	6,978	(56,456)	50,956	7,222	(5,510)

Item	Sales class and debt/asset ratio					
	$100,000-249,999			$50,000-99,999		
	0-40 pct.	40-70 pct.	Over 70 pct.	0-40 pct.	40-70 pct.	Over 70 pct.
	Dollars					
Gross farm income	147,787	157,949	155,358	69,279	76,157	72,653
Net cash operating margin	27,392	18,169	2,999	10,643	(2,866)	(1,574)
Off-farm income	12,252	12,252	12,252	11,253	11,253	11,253
Total cash available	39,644	30,421	15,251	22,895	9,386	10,678
Annual debt repayment	4,309	14,323	15,905	2,294	9,892	10,347
Family living expenses	20,938	20,938	20,938	20,938	20,938	20,938
Total cash needs	25,247	35,261	36,843	23,232	30,830	31,285
Cash surplus or (shortfall)	14,397	(4,840)	(21,592)	(1,336)	(22,443)	(21,606)

Item	Sales class and debt/asset ratio					
	$25,000-49,999			$10,000-24,999		
	0-40 pct.	40-70 pct.	Over 70 pct.	0-40 pct.	40-70 pct.	Over 70 pct.
	Dollars					
Gross farm income	35,742	38,236	36,769	16,675	16,498	16,481
Net cash operating margin	1,326	(8,035)	(9,445)	(1,947)	(14,319)	(19,979)
Off-farm income	12,987	12,987	12,987	16,589	16,589	16,589
Total cash available	14,313	4,952	3,542	14,642	2,270	(3,390)
Annual debt repayment	1,163	5,071	7,294	527	3,736	5,807
Family living expenses	20,938	20,938	20,938	20,938	20,938	20,938
Total cash needs	22,101	26,009	28,232	21,465	24,674	26,745
Cash surplus or (shortfall)	(7,788)	(21,057)	(24,690)	(6,823)	(22,404)	(30,135)

Item	Sales class and debt/asset ratio		
	Less than $10,000		
	0-40 pct.	40-70 pct.	Over 70 pct.
	Dollars		
Gross farm income	3,265	2,922	2,002
Net cash operating margin	(3,994)	(11,582)	(8,283)
Off-farm income	20,502	20,502	20,502
Total cash available	16,508	8,920	12,219
Annual debt repayment	272	2,585	2,650
Family living expenses	20,938	20,938	20,938
Total cash needs	21,210	23,523	23,588
Cash surplus or (shortfall)	(4,702)	(14,603)	(11,369)

1/ See app. table 1 for source and details of calculations.

Table 6--Average shortrun cash availability and needs by type of farm and debt/asset ratio, 1983

Item	Cash grain			Field crop			Vegetable and melon		
	0-40 pct.	40-70 pct.	Over 70 pct.	0-40 pct.	40-70 pct.	Over 70 pct.	0-40 pct.	40-70 pct.	Over 70 pct.
					Dollars				
Gross farm income	91,935	127,856	137,572	74,091	110,735	151,462	197,871	132,169	623,003
Net cash operating margin	24,778	18,012	8,813	10,621	10,710	23,844	23,836	16,866	(10,193)
Off-farm income	14,484	14,484	14,484	16,411	16,411	16,411	22,222	22,222	22,222
Total cash available	39,262	32,496	23,297	27,032	27,171	40,255	46,058	39,088	12,029
Annual debt repayment	3,384	13,570	15,733	1,597	7,129	10,826	2,419	7,336	26,448
Family living expenses	20,938	20,938	20,938	20,938	20,938	20,938	20,938	20,938	20,938
Total cash needs	24,322	34,508	36,671	22,535	28,067	31,764	23,357	28,304	47,386
Cash surplus or (shortfall)	14,940	(2,012)	(13,374)	4,497	(946)	8,491	22,501	10,814	(35,357)

Item	Fruit and nut			Nursery and greenhouse			General crop		
	0-40 pct.	40-70 pct.	Over 70 pct.	0-40 pct.	40-70 pct.	Over 70 pct.	0-40 pct.	40-70 pct.	Over 70 pct.
					Dollars				
Gross farm income	111,879	89,269	211,118	220,552	(d)	(d)	4,851	8,944	4,942
Net cash operating margin	15,648	(9,250)	15,114	65,835	(d)	(d)	(7,864)	(16,553)	(17,648)
Off-farm income	28,979	28,979	28,979	20,940	(d)	(d)	20,775	20,775	20,775
Total cash available	44,627	19,729	44,093	86,775	(d)	(d)	12,911	4,222	3,127
Annual debt repayment	2,942	9,363	17,428	2,250	(d)	(d)	406	3,026	4,307
Family living expenses	20,938	20,938	20,938	20,938	(d)	(d)	20,938	20,938	20,938
Total cash needs	23,880	30,301	38,366	23,188	(d)	(d)	21,344	23,964	25,245
Cash surplus or (shortfall)	20,747	(10,572)	5,727	63,587	(d)	(d)	(8,433)	(19,742)	(19,758)

Item	General livestock			Dairy			Poultry and egg		
	0-40 pct.	40-70 pct.	Over 70 pct.	0-40 pct.	40-70 pct.	Over 70 pct.	0-40 pct.	40-70 pct.	Over 70 pct.
					Dollars				
Gross farm income	77,365	152,810	170,507	117,434	147,576	144,620	224,267	260,509	269,039
Net cash operating margin	2,248	(10,720)	(11,285)	25,172	15,092	(5)	42,502	27,769	45
Off-farm income	18,893	18,893	18,893	7,621	7,621	7,621	14,012	14,012	14,012
Total cash available	21,141	8,173	7,608	32,793	22,713	7,616	56,514	41,781	14,057
Annual debt repayment	2,180	12,171	12,953	2,674	11,090	16,283	1,095	4,986	9,498
Family living expenses	20,938	20,938	20,938	20,938	20,938	20,938	20,938	20,938	20,938
Total cash needs	23,118	33,109	33,891	23,612	37,221	37,221	37,221	25,924	30,436
Cash surplus or (shortfall)	(1,977)	(24,936)	(26,283)	9,181	(29,605)	(29,605)	34,481	15,857	(16,379)

Item	Other livestock		
	0-40 pct.	40-70 pct.	Over 70 pct.
		Dollars	
Gross farm income	79,202	73,075	59,169
Net cash operating margin	(21,799)	(76,979)	1,314
Off-farm income	23,136	23,136	23,136
Total cash available	1,337	(53,843)	24,450
Annual debt repayment	1,598	11,846	3,472
Family living expenses	20,938	20,933	20,938
Total cash needs	22,536	32,784	24,410
Cash surplus or (shortfall)	(21,199)	(86,627)	40

(d) -- Data not available due to disclosure rules.

Smaller farms have much larger off-farm income sources which partially offset their net cash operating losses, indicating that many of the farms below $50,000 in sales are not as dependent upon agricultural conditions as larger farms. In addition, the average cash shortfall of the largest farms (over $500,000 in sales) in the very highly leveraged category may not be representative of that group. The available data are limited at such large sizes and debt/asset ratios; thus, they may not be reliable at that extreme.

Some cash shortfalls are only small proportions of total cash flows and relatively small proportions of family living allowances. Farm operators with small cash shortfalls may be able to tighten their belts and defer some consumption expenditures to accommodate them. For example, farms with over $250,000 in sales and debt/asset ratios over 70 percent likely could accommodate their $5,500 average cash shortfall.

By type of farm, similar patterns of increasing severity of cash shortfalls by debt/asset ratio were found for all types of farms (table 6). Dairy, general livestock, and cash grain farms exhibited the greatest sensitivity of cash flows to debt/asset ratios. In the case of dairy farms, this may be because dairy farming is not easily combined with off-farm employment; thus, these farms are more seriously affected by farm cost and return conditions. For cash grain and general livestock farms, the sensitivity to increasing debt/asset ratios probably stems from the large proportion of land assets in these types of farms. Since land has historically provided a net cash rate of return of only 2 to 4 percent, high debt/asset ratios in times of high interest rates quickly lead to cash shortfalls.

The average sizes of farms vary considerably both by type and by debt/asset ratio, limiting the interpretations that can be drawn from the results by type of farm (table 6). General crop farms are very small, having average sales of less than $10,000. Poultry and egg farms average over $250,000 in sales. Within each type, farms with higher debt/asset ratios generally have greater average gross incomes.

Some types of farms can have high debt/asset ratios without experiencing serious financial stress. Vegetable and melon farms are much larger than the other types of farms, especially those with very high debt/asset ratios. However, such large farms rent a large proportion of their land; thus their debt/asset ratios do not fully reflect the strength of the business. Poultry and egg farms exhibit the least sensitivity of cash flows to debt/asset ratios, although debt ratios over 70 percent still cause large cash shortfalls on both types of farms. Similarly, other livestock farms are not very sensitive to debt/asset ratios. Both poultry and other livestock farms are highly industrialized and do not rely heavily on land assets.

The analysis of cash flows by type of farm points out that cash grain farms and dairy farms, despite, or perhaps because of, a long history of price and income support programs, have above-average proportions of farms with high debt/asset ratios and serious cash shortfalls. Furthermore, fruit and nut farms as a group do not appear to have serious cash flow problems in any category of debt/asset ratio. Poultry and egg farms and vegetable and melon farms have serious cash flow problems only at very high debt/asset ratios. None of these products or types of farms have had extensive price or income support programs.

Family-Size Commercial Farms

Financial and cash flow problems can be viewed from the perspective of all farms, or from the perspective of the family-size commercial farms. Almost 1.5 million farms have sales of less than $50,000. Operators of these farms depend primarily on off-farm income for a large proportion of their livelihood, and in many cases, these operators consider farming as a supplement to their off-farm occupation. These farm operators typically qualify for and repay loans primarily on the basis of their off-farm income sources. Furthermore, these farms have tended to show negative average net farm incomes over several years, yet most of them continue in operation.

At the large end of the spectrum, farms with over $500,000 in sales tend to be highly industrialized farms and producers of specialty commodities, such as feedlots, poultry operations, nurseries, and sod farms. These types and sizes of farms have more widely spread ownership, have a smaller proportion of their costs committed to asset ownership, and customarily operate with higher debt/asset ratios than do traditional farms. Furthermore, the survey data and cash flow analysis show these farms to have no significant cash flow problems except at debt/asset ratios above 70 percent.

The intermediate group, family-size commercial farms, has been the traditional focus of public concern for agriculture and, more recently, for financial stress in agriculture. Farms of this size group make up about one-third of all farms (679,000) and depend primarily on agriculture for their family income. The remainder of the analysis focuses on both the financial situations of all farms, and those of the family-size commercial farms.

Cash flow shortfalls by sales class along with numbers and percentages of farms are summarized in table 7. A cash shortfall indicates that, for the farms in that group, their average cash expenses exceed their average cash incomes. As many as 85.7 percent of all farms have cash shortfalls. Nearly half of all family-size commercial farms have cash shortfalls, as do virtually all those with debt/asset ratios over 70 percent. Within each group, however, there are some farms which have larger and some which have smaller cash shortfalls.

Table 7--Estimated number and percentage of farms with cash shortfalls by sales class and debt/asset ratio, 1983

Sales class	Debt/asset ratio			Farms with cash shortfalls
	0-40 percent	40-70 percent	Over 70 percent	
Very large farms				
$500,000 and over:				
Farms	16,400	5,200	4,500	4,500
Percentage of all farms	--	--	.3	.3
Average shortfall, dollars	--	--	56,456	56,456
Family-size commercial farms				
$250,000-499,999:				
Farms	61,600	17,600	11,000	11,000
Percentage of all farms	--	--	.5	.5
Average shortfall, dollars	--	--	5,510	5,510
$100,000-249,999:				
Farms	209,000	52,800	26,400	79,200
Percentage of all farms	--	2.4	1.2	3.6
Average shortfall, dollars	--	4,840	21,592	10,424
$50,000-99,999:				
Farms	230,300	44,000	26,400	300,700
Percentage of all farms	10.6	2.0	1.2	13.8
Average shortfall, dollars	1,336	22,443	21,606	6,158
Family-size commercial farms with cash shortfall	230,300	96,800	63,800	390,900
Percentage of commercial farms	34.0	14.3	9.4	57.7
Total family-size commercial farms	500,900	114,400	63,800	679,100
Small farms				
$25,000-49,999:				
Farms	224,400	26,400	22,000	272,800
Percentage of all farms	10.2	1.2	1.0	12.4
Average shortfalls, dollars	7,789	21,057	24,690	10,435
$10,000-24,999:				
Farms	327,800	30,000	16,400	374,200
Percentage of all farms	14.9	1.4	0.7	17.0
Average shortfall, dollars	6,823	22,404	30,135	9,066
Less than $10,000:				
Farms	730,400	66,800	36,400	833,600
Percentage of all farms	33.2	3.0	1.7	37.9
Average shortfall, dollars	4,702	14,603	11,369	5,784
All farms				
All farms with cash shortfalls	1,513,000	220,000	143,000	1,876,000
Percentage of all farms	69.1	10.0	6.6	85.7
All farms	1,799,900	242,800	143,100	2,185,800

-- = Not applicable; these farms did not have a cash shortfall.

Farms with Financial Stress

The average annual cash shortfalls are shown for comparison as percentages of net worth and percentages of cash sales (table 8). These comparisons suggest likely trends of the financial status of farms. Average cash shortfalls for family-size commercial farms are between 2 and 12 percent of net worth for farms with debt/asset ratios between 40 and 70 percent. For very highly leveraged farms, average cash shortfalls are much larger than their beginning net worths, indicating that most such farms would be technically insolvent at the end of one more year of operation. Note that farms in the very highly leveraged category currently have debt/asset ratios that average around 100 percent. This indicates that as many as half of them may already be technically insolvent. It would take average price increases of up to 32 percent to restore all family-size commercial farms to positive net cash flows. Price increases of this magnitude seem improbable given normal weather and current expectations of domestic and foreign demands. Traditional commodity programs could not boost prices to the extent needed to

Table 8--Average annual cash shortfalls as a percentage of net worth, percentage points of debt/asset ratio, and percentage of farm cash sales, 1983

Sales class	Debt/asset ratio		
	0-40 percent	40-70 percent	Over 70 percent
Very large farms			
$500,000 and over:			
Annual cash shortfall, dollars	--	--	56,456
Percentage of net worth	--	--	-75.5
Beginning debt/asset ratio	--	--	100.7
Increase in debt/asset ratio 1/	--	--	5.1
Required percentage increase in cash sales	--	--	5.2
Family-size commercial farms			
$250,000-499,999:			
Annual cash shortfall, dollars,	--	--	5,510
Percentage of net worth	--	--	-246.0
Beginning debt/asset ratio	--	--	100.4
Increase in debt/asset ratio 1/	--	--	1.0
Required percentage increase in cash sales	--	--	1.8
$100,000-249,999:			
Annual cash shortfall, dollars	--	4,840	21,592
Percentage of net worth	--	1.8	339.3
Beginning debt/asset ratio	--	52.2	98.0
Increase in debt/asset ratio 1/	--	.9	6.6
Required percentage increase in cash sales	--	3.3	14.7
$50,000-99,999:			
Annual cash shortfall, dollars	1,336	22,443	21,606
Percentage of net worth	.3	12.1	1,106.3
Beginning debt/asset ratio	9.6	51.5	99.1
Increase in debt/asset ratio 1/	.3	5.8	10.3
Required percentage increase in cash sales	2.0	31.8	32.5
Small farms			
$25,000-49,999:			
Annual cash shortfall, dollars	7,788	21,057	24,690
Percentage of net worth	24.4	21.6	-657.3
Beginning debt/asset ratio	6.9	51.0	102.6
Increase in debt/asset ratio 1/	2.3	10.6	17.4
Required percentage increase in cash sales	23.7	61.1	72.9
$10,000-24,999:			
Annual cash shortfall	6,823	22,404	30,135
Percentage of net worth	2.8	33.1	-393.7
Beginning debt/asset ratio	4.1	52.5	107.1
Increase in debt/asset ratio 1/	2.7	15.7	27.8
Required percent increase in cash sales	44.2	150.2	211.3
Less than $10,000:			
Annual cash shortfall, dollars	4,702	14,603	11,369
Percentage of net worth	3.3	29.6	-130.8
Beginning debt/asset ratio	3.6	51.2	119.6
Increase in debt/asset ratio 1/	3.1	14.5	25.7
Required percent increase in cash sales	134.9	499.8	567.9

-- = Not applicable; these farms did not have a cash shortfall.

1/ Increased percentage points of debt/asset ratio that would occur if the cash shortfall were refinanced.

restore positive cash flows for family-size commercial farms without further reducing export demands and increasing the excess capacity of the farm sector. Such artificial price increases would also give very large windfall gains to the commercial farms that do not currently have cash flow problems. To the extent that farmers' problems are financial adjustment difficulties, as opposed to low income problems, raising commodity support prices would be an inefficent way to attempt to solve these problems.

Changing farmland values also affect the debt/asset ratios of farms. Farmland values continue to decline in many parts of the country. Debt/asset ratios would increase by 0.64 to 0.75 percent for every 1-percent decline in land values, because land assets make up 64 percent of the assets of farm operators and 75 percent for the sector as a whole (including nonoperator landowners).

The foregoing analysis of debt/asset ratios and average cash flows suggests four categories of farms by degree of financial distress (table 9). These estimates are thus likely upper bounds on numbers of farms experiencing financial stress. In 1984, an estimated 70,000 farms of all sizes (3.3 percent) were technically insolvent, that is, had debt/asset ratios over 100 percent. An additional 73,000 farms had debt/asset ratios between 70 and 100 percent and could not survive more than 2 years like the recent past without becoming technically insolvent. A further 220,000 farms (10 percent of all farms) had debt/asset ratios between 40 and 70 percent and had cash flow shortfalls. These farms have serious financial problems, but could survive for 4 or more years under conditions similar to the recent past without becoming technically insolvent.

The number of family-size commercial farms with financial stress was lower, totaling 178,000 in 1984. However, these farms are crucially dependent on agricultural conditions and are thus most vulnerable to financial stress. Many of the smaller farms have average cash shortfalls, but these are related more to their small size than to the use of financial leverage. Even so, they are probably not in serious danger of foreclosure or forced liquidation because of their off-farm income sources.

Table 9--Current financial stress: Estimated number and proportion of farms by degrees of financial stress, all farms and family-size commercial farms, January 1, 1984

Status	All farms		Family-size commercial farms	
	Farms	Proportion of all farms	Farms	Proportion of commercial farms
	Number	Percent	Number	Percent
Technically insolvent (debt/asset ratio over 100 percent)	70,000	3.3	30,000	4.4
Extreme financial problems (debt/asset ratio of 70-100 percent)	73,000	3.3	34,000	5.0
Serious financial problems (debt/asset ratio of 40-70 percent)	220,000	10.0	114,000	16.8
No apparent financial problems (debt/asset ratios under 40 percent)	1,822,800	83.4	501,000	73.7

Employing some plausible assumptions about the proportions of farms that can change their organization to cope with current financial stress, it is possible to estimate the likely increase in farms with financial stress under a continuation of the conditions of the recent past. For example, farmers might cut back on some variable inputs, find new revenue sources, or find additional off-farm employment for a family member. Assuming farmers can reorganize their businesses to reduce their cash shortfalls by half, and that land values decline at a national average rate of 5 percent per year, then the annual increases shown in table 10 result.

These annual rates of change suggest that by early 1985, approximately 43,000 family-size commercial farms could be both technically insolvent and have severe cash shortfalls. An additional 50,000 family-size farms could be in extreme financial difficulty and rapidly moving toward technical insolvency. As many as 136,000 family-size farms could have serious financial problems. Another 450,000 family-size farms would still not have problems related to use of financial leverage. For farms of all sizes, the numbers with financial stress would be higher, but many of the smaller farms would not face foreclosure or forced liquidation.

FINANCIAL STATUS OF FARM LENDERS

The reverse side of farm financial problems are farm lender problems. As farms experience financial stress, they transmit it, to some extent, to farm lenders through loan delinquency and loan losses. As farmers' asset values decline, lenders have less adequate security for new or existing loans. If too high a proportion of the portfolio of a lender becomes nonperforming loans, then the lender may face failure or reorganization. Distribution of debt by debt/asset ratios and cash flow status are thus crucial indicators of likely stress on agricultural lenders, as is proportion of the lender's portfolio in agricultural loans.

Table 10--Estimated net annual change in number and proportion of farms by degree of financial stress, all size groups, 1984 to 1985 1/

Status	All farms: Farms	All farms: Proportion of all farms	Family-size commercial farms: Farms	Family-size commercial farms: Proportion of commercial farms
	Number	Percent	Number	Percent
Technically insolvent (debt/asset ratios over 100 percent)	+28,000	+1.3	+13,000	+1.9
Extreme financial problems (debt/asset of 70-100 percent)	+36,000	+1.7	+16,000	+2.4
Serious financial problems (debt-asset ratios of 40-70 percent)	+197,000	+9.5	+22,000	+3.2
No apparent financial problems (debt/asset ratios under 40 percent)	-261,000	-12.5	-51,000	-7.5

1/ Assuming cash shortfalls similar to those that occurred in 1983 and a 5-percent national average decline in farmland values in 1984.

Debt/Asset Ratio

The Farm Production Expenditure Survey data indicate that very high proportions of outstanding farm debt are owed by farmers in the highly leveraged and very highly leveraged categories (table 11). Nationally, 23.7 percent of farm debt is owed by farms with debt/asset ratios over 70 percent. An additional 32.5 percent of the debt is owed by farms with debt/asset ratios of 40 to 70 percent. In total, over 50 percent of all farm debt is at risk from having high debt/asset ratios. A high proportion of loans in the very highly leveraged category may lead to liquidation, foreclosure, or bankruptcy of the borrower. Most such borrowers have serious cash shortfalls and as many as half them may be technically insolvent at the present time. Loans in the highly leveraged category may require refinancing or stretch-outs, and may steadily erode toward insolvency if income and financial conditions remain as they are currently.

Table 11--Distribution of total debts by debt/asset ratio and sales class, type of farm, and region, January 1, 1984

Item	Highly leveraged (debt/asset ratios of 40-70 percent)		Very highly leveraged (debt/asset ratios over 70 percent)	
	Percent of class	Percent of all debt	Percent of class	Percent of all debt
Sales class:				
$500,000 and over	30.2	4.8	30.1	4.9
$250,000-499,999	28.7	5.1	23.8	4.2
$100,000-249,999	36.0	10.5	20.4	5.9
$50,000-99,999	35.3	6.2	21.9	3.9
$25,000-49,999	24.3	1.9	28.5	2.2
$10,000-24,999	29.6	3.9	23.5	2.6
Less than $10,000	36.9		21.2	
All farms	32.5	32.5	23.7	23.7
Type of farm:				
Cash grain	33.4		20.8	
Field crop	27.4		31.4	
Vegetable and melon	27.2		34.6	
Fruit and nut	17.8		17.5	
Nursery	35.9		(d)	
General crop	26.9		25.9	
General livestock	32.1		23.1	
Dairy	36.9		26.4	
Poultry and egg	28.1		52.9	
Other livestock	48.9		10.3	
All farms	32.5		23.7	
Region:				
Northeast	40.7		17.9	
Lake States	36.8		26.5	
Corn Belt	36.0		15.6	
Northern Plains	34.3		25.9	
Appalachian	24.1		25.6	
Southeast	28.3		35.6	
Delta States	26.6		38.0	
Southern Plains	24.8		27.3	
Mountain States	28.4		24.3	
Pacific States	29.1		22.5	
United States	32.5		23.7	

(d) = Data not available due to disclosure rules.
Source: (1).

The largest farms have the highest proportion of debt in the highly or very highly leveraged categories. Lower sales classes have progressively lower proportions of debt with high to very high financial leverage. Debt owed by commercial farms that have both high financial leverage and serious cash shortfalls is concentrated on very highly financially leveraged farms with sales between $50,000 and $500,000.

Poultry and egg farms have the highest proportion of their debt (53 percent) in the very highly leveraged category. In total, over 80 percent of their debt is in the highly leveraged categories; but poultry and egg farms show average cash flow shortfalls only at debt/asset ratios above 70 percent. Other specialized livestock operations--dairy, general livestock, and other livestock--all have very high proportions of debt in the highly leveraged or very highly leveraged categories. Both dairy and general livestock farms also show cash flow shortfalls at high and very high debt/asset ratios. Some crop farms, led by vegetable farms and field crop farms, have above-average proportions of debt in the highly leveraged and very highly leveraged categories, but generally do not show severe cash flow problems. Cash grain farms exhibit above-average proportions of debt in highly leveraged and very highly leveraged categories. Average cash shortfalls for cash grain farms in these categories are serious.

The Southeast and Delta States are the regions with the highest proportions of debt in the very highly leveraged category. Many of these farms are already Farmers Home Administration borrowers. The highest proportions of debt in the problem range of 40 to 70 percent are found in the Northeast, Lake States, Corn Belt, and Northern Plains.

Proportions of Debt in Financial Stress

From the cash flow analysis of farms discussed in the preceding section, the proportions of debt in financial stress can be derived for all farms as well as for family-size farms (table 12). As of January 1984, as much as 11 percent of all debt was held by farms that survey data indicated to be technically insolvent and experiencing serious cash shortfalls. Family farms in this category owed 6.5 percent of all debt. A further 7.5 percent of the debt was owed by family-size farms with debt/asset ratios between 70 and 100 percent and having, on average, serious cash shortfalls. These farms have extreme financial problems and the debt they owe is rapidly tending toward insolvency. A futher 21.7 percent of the debt was owed by family-size farms with both debt/asset ratios between 40 and 70 percent and serious cash flow shortfalls. Nearly 36 percent of all debt was owed by family-size commercial farms with some degree of financial stress. All farms with both high debt/asset ratios and cash shortfalls owed over 46 percent of the debt.

Table 12--Reported proportion of total farm debt by degree of financial stress, all farms and family-size commercial farms, January 1, 1984

Status	All farms	Family-size commercial farms
	Percent	
Technically insolvent (debt/asset ratio over 100 percent)	11.0	6.5
Extreme financial problems (debt/asset ratio of 70-100 percent)	12.7	7.5
Serious financial problems (debt/asset ratios of 40-70 percent)	22.6	21.7
No apparent financial problems (debt/asset ratios under 40 percent)	53.7	28.5

Continuation of low commodity prices, high interest costs, and declining asset values similar to the recent past would result in increasing proportions of debt in all the financial stress categories (table 13). By early 1985, as much as 15 percent of current outstanding debt may be owed by farms that are technically insolvent. Technically insolvent commercial farmers would owe nearly 10 percent of all farm debt. An additional 19 percent of current outstanding debt could be owed by farms that have debt/asset ratios from 70 to 100 percent and have, on average, very serious cash shortfalls. Commercial farms would owe over half of this debt. The amount of debt in the intermediate category of 40 to 70 percent debt/asset ratios with serious cash shortfalls would increase by half to just over 31 percent. Commercial farms with debt/asset ratios from 40 to 70 percent would owe 26 percent of all debt. If current conditions were to last 2 more years without significant improvement in farm income prospects, then the proportions of debt in various degrees of financial stress would continue to increase by approximately the annual rates shown in table 13.

Table 13--Estimated annual change in proportion of debt by degree of financial stress, all size groups, 1984 to 1985 1/

Status	All farms	Family-size commercial farms
	Percent	
Technically insolvent (debt/asset ratios over 100 percent)	+4.4	+2.8
Extreme financial problems (debt/asset ratios of 70-100 percent)	+6.3	+3.6
Serious financial problems (debt/asset ratios of 40-70 percent)	+9.0	+4.2
No apparent financial problems (debt/asset ratios under 40 percent)	-19.7	-10.6

1/ Assuming cash shortfalls similar to 1983 and a 5-percent national average decline in farmland values in 1984.

Who Holds the Debt?

The major farm lenders are the commercial banks, the Farm Credit System, Farmers Home Administration (FmHA), life insurance companies, the Commodity Credit Corporation, and individuals and others (table 14). Commercial banks are most important in nonreal estate debt. Borrowers' cash shortfalls and loan delinquency are problems for the commercial banks. The Farm Credit System (Federal Land Banks and Production Credit Associations) holds the largest share of real estate debt and is thus the most affected by declining land values. The third most important class of lender is "individuals and others," who account for nearly as much total debt as the commercial banks. Very little is known about terms and conditions of loans by individuals and dealers, nor how such lenders fare when their borrowers face financial stress. If their loans are unsecured, these lenders fare the worst of all creditors. However, if they are holders of land contracts they may fare the best of all creditors. The FmHA holds almost 12 percent of all outstanding farm debt; its nonreal estate debt holdings rose dramatically in the 1970's.

Total outstanding debt as of January 1, 1985, was $212.1 billion, down $2.5 billion from 1984. Total debt by type of loan and lender is shown in table 15.

Table 14--Distribution of farm debt by lender, January 1, 1985 1/

Lender	Type of debt		Total
	Real estate	Nonreal estate	
		Percent	
Commercial banks	4.8	19.1	23.9
Farm Credit System	22.8	9.0	31.8
Federal Land Banks	22.8	—	22.8
Production Credit Associations	--	8.6	8.6
Federal Intermediate Credit Banks 2/	--	.4	.4
Farmers Home Administration	4.7	7.2	11.9
Life insurance companies	5.8	--	5.8
Individuals and others 3/	14.1	8.6	22.7
Commodity Credit Corporation	--	3.9	3.9
Total	52.3	47.7	100.0

-- = Not applicable.

1/ Preliminary. Due to rounding, subcategories may not add to totals.

2/ Financial institutions other than PCA's that obtain funds from the FICB's.

3/ Includes Small Business Administration.

Table 15--Total farm debt by lender, January 1, 1985 1/

Lender	Type of debt		Total
	Real estate	Nonreal estate	
		Million dollars	
Commercial banks	10,179	40,551	50,730
Farm Credit System	48,444	19,006	67,450
Federal Land Banks	48 444	--	48,444
Production Credit Associations	--	18,129	18,129
Federal Intermediate Credit Banks 2/	--	877	877
Farmers Home Administration	9,956	15,206	25,162
Life insurance companies	12,375	--	12,375
Individuals and others 3/	29,900	18,200	48,100
Commodity Credit Corporation	--	8,312	8,312
Total	110,854	101,275	212,129

-- = Not applicable.

1/ Preliminary.

2/ Financial institutions other than PCA's that obtain funds from the FICB's.

3/ Includes Small Business Administration.

CURRENT STRESS AMONG AGRICULTURAL LENDERS

Agricultural lenders have become increasingly concerned about farm loan defaults and delinquencies. In 1983, loan losses as a share of outstanding loans were 1.2 percent for Production Credit Associations (PCA's), 0.94 percent for agricultural banks, 0.02 percent for Federal Land Banks (FLB's), and 0.15 percent for the FmHA. Some 2.6 percent of the dollar amount of life insurance company mortgage loans were in the process of foreclosure in 1983. The general level of lender stress increased further in 1984. In response, farm lenders have tightened credit requirements and more overdue accounts are being closed out. Agricultural interest rates remain high despite their decline since 1981-82. Lenders remain cautious in the current economic environment.

Commercial Banks

The Board of Governors of the Federal Reserve System defines agricultural banks as those with less than $500 million in assets and with farm loans accounting for 25 percent or more of total loans. Other smaller banks are those with less than $500 million in assets and with farm loans accounting for less than 25 percent of total loans. As of March 31, 1984, there were 440 insured commercial banks with total assets over $500 million. Of the 13,963 banks with assets of less than $500 million, 4,077 were agricultural banks and 9,886 were classified as other smaller banks.

A significant decline in loan quality at agricultural banks relative to the recent past and relative to the performance of other smaller banks is indicated by call report data. Beginning in December 1982, all banks were required to report four categories of delinquent loans (past due 30 to 89 days and still accruing interest, past due 90 days or more and still accruing, nonaccrual, and renegotiated "troubled" debt). On September 30, 1984, banks more heavily involved in farm lending tended to have a higher proportion of delinquent loans and their recent delinquency rates had risen, while those of the more urban banks had declined somewhat (table 16). Total delinquent loans at agricultural banks increased to 5.5 percent of total loans on September 30, 1984, up from 5.0 percent a year earlier. However, at other smaller banks the proportion declined from 4.8 percent to 4.5 percent during the same period.

Table 16--Loan delinquencies for agricultural and other smaller banks

Date	All loan delinquencies 1/		Nonaccrual loan delinquencies 2/	
	Agricultural banks	Other smaller banks	Agricultural banks	Other smaller banks
	Percent of total loans			
Dec. 31, 1982	4.7	5.3	0.7	1.1
Mar. 31, 1983	5.3	5.3	.9	1.2
June 30, 1983	4.7	4.9	1.0	1.2
Sept. 30, 1983	5.0	4.8	1.1	1.2
Dec. 31, 1983	5.2	4.7	1.2	1.1
Mar. 31, 1984	6.1	4.6	1.5	1.2
June 30, 1984	5.5	4.3	1.6	1.2
Sept. 30, 1984	5.5	4.5	1.8	1.2

1/ Total past-due, nonaccrual, and renegotiated "troubled" debt.
2/ Loans that are more than 90 days past due and not accruing interest.

Source: Board of Governors of the Federal Reserve System.

Agricultural banks have a higher proportion of delinquent loans in the nonaccrual category, often the last stage before charging off a nonperforming loan.

Between September 1983 and September 1984, nonaccrual loans at agricultural banks rose from 1.1 percent to 1.8 percent of total loans while the rate at smaller nonagricultural banks remained at 1.2 percent (table 16).

Another measure of lender stress is total net loan charge-offs (losses) as a percentage of total loans outstanding. Annual Federal Reserve System data for 1979-83 show a rising trend in the percentage of outstanding loans charged off for all banks with total assets under $500 million, but a faster rate of increase for the agricultural banks, as noted below:

Category	1979	1980	1981	1982	1983	1984 1/
Agricultural banks	0.19	0.32	0.42	0.69	0.94	0.67
Other smaller banks	.30	.38	.40	.61	.67	.37

1/ Data for the first 9 months of calendar 1984. Fourth-quarter charge-offs tend to be the highest of the year.

The number of problem banks as defined by the Federal Deposit Insurance Corporation (FDIC) serves to further illustrate the worsening condition of agricultural banks during 1984 (table 17). Between January and December 1984, the total number of problem banks grew by approximately one-third. A little over 80 percent of this increase was accounted for by 11 States (Illinois, Iowa, Kansas, Minnesota, Missouri, Montana, Nebraska, South Dakota, Texas, Wisconsin, and Wyoming) that comprise much of the Midwest and Plains regions. When California was added to this list, all other States together experienced a net decline in the number of problem banks during this period.

In the last half of 1983, the number of problem banks as defined by the FDIC increased substantially but the proportion that were agricultural banks changed very little. Moreover, the relative number of agricultural banks on the problem bank list was below their share of the total number of commercial banks (28 percent of all commercial banks are agricultural banks). This quickly changed during the first half of 1984; the percentage of problem banks defined as agricultural grew from about 24 percent to just over 34 percent. The increase in agricultural problem banks in absolute terms more than accounted for the total growth in problem banks over the first half of 1984. Between June and December 1984, the percentage of problem agricultural banks increased still further.

Table 17--Number and share of problem commercial banks by type of bank, 1983-84

Date	Agricultural banks		Other banks		Total
	Total	Share	Total	Share	
	Number	Percent	Number	Percent	Number
June 1983	106	22.0	375	78.0	481
Dec. 1983	146	24.2	457	75.8	603
June 1984	231	34.4	440	65.6	671
Dec. 1984	288	36.0	512	64.0	800

Source: Federal Deposit Insurance Corporation.

The banking industry for most of its history has experienced an extremely low failure rate because of extensive Government regulation and conservative management practices. The number of bank failures has increased sharply in recent years. During the entire 1971-80 period, 83 banks failed (data include mutual savings banks). Another 100 failed during 1981-83 and 79 failed in 1984. Various explanations have been offered for the recent increases in problem banks and failed banks, including increased competition stemming from deregulation, the severity of the recent recession, the unevenness of the recovery with certain lagging regions and industries, and continued high real interest rates.

The failure rate of agricultural banks lagged behind the general bank failure rate until recently. In 1983, only 6 of the 44 bank failures (data exclude mutual savings banks) were agricultural banks. Through June 1984, only 8 of the 42 bank failures involved agricultural banks. From July 1 to December 21, however, 15 of the 32 bank failures were agricultural banks.

Farm Credit System

The Farm Credit System (FCS) has experienced growing economic stress in the 1980's. This first occurred among the PCA's, and after a significant lag became evident among the FLB's. The declines in PCA net earnings after 1981 and FLB net earnings after 1982 are the result of a complex set of factors. The continued drain on cash flow has caused farmers to attempt to restructure their debt and pay down loans.

This initially affected PCA's the most. But, the softening farmland prices and low turnover rates in the real estate market have affected FLB's. FCS interest costs have been high and the FCS cut interest margins when the farm stress first hit, which resulted in lower earnings. Loan losses and delinquencies have increased markedly and other lenders have become more competitive. Both the PCA and FLB loan delinquency rates have typically reached a seasonal peak at the end of the first quarter of the year, followed by a decline in the second quarter. In recent years the rate of delinquencies recorded in the first quarter has been higher than those found in the previous year's first quarter. Stress on PCA borrowers appears to have reached its peak early in 1984, as 8.1 percent of outstanding PCA loans were delinquent on March 31, 1984, compared with 6.1 percent a year earlier. Although the rate subsided to 4.7 percent on September 30, 1984, it was still higher than the 3.4-percent rate reported 1 year earlier. The amount of all FLB delinquencies continues to constitute a small share of loans outstanding, and peaked at 0.8 percent on March 31, 1984, compared with 0.7 percent a year earlier. It was 0.6 percent on September 30, 1984. The number of delinquent FLB loans increased significantly, however, in the first quarter of 1984, to 4.4 percent of all loans compared with a first-quarter 1983 figure of 4.0 percent, before falling back to 3.4 percent on September 30, 1984.

PCA's absorbed loan losses of $109.5 million for the entire 1970-79 period; loan losses totaled $463.8 million during 1980-83. FLB's experienced total loan losses of $6.7 million during the 1970-80 period. This increased to $12.5 million for 1981-83. PCA net loan losses as a percentage of the PCA allowance for loan losses (reserves) never rose above 7.5 percent during the 1970-81 period, but this ratio rose to 26.1 percent in 1982 and 42.3 percent in 1983. FLB net loan losses as a proportion of FLB allowances for loan losses were insignificant most years following 1970, but increased to 2.0 percent in 1983.

PCA loan charge-offs as a share of loans outstanding rose from 0.11 percent in 1980 to 1.2 percent in 1983. PCA loans in the process of liquidation were 0.38 percent of all loans on December 31, 1980, but by September 30, 1984, the ratio was 2.68 percent. Some 3.21 percent of PCA loans were 90 days or more past due on September 30, 1984. The FLB situation is more positive, with only 0.02 percent of the loans being charged off in 1983. FLB loans in process of liquidation increased from 0.15 percent of all loans on December 31, 1980, to 1.74 percent on September 30, 1984. FLB loans 90 or more days past due totaled 0.45 percent of all loans on September 30, 1984.

Since the farm sector's current financial difficulties have emerged, a number of PCA's have been liquidated, most of them in the district of the Spokane Federal Intermediate Credit Bank (FICB). Other PCA's have been merged, primarily because of financial problems. The Spokane FICB itself went through reorganization and its situation appears to have been resolved through the infusion of capital from other FICB's. Other PCA's and FICB's are still facing financial stress.

Farmers Home Administration

FmHA farm credit programs include the provision of adequate credit to owner- and tenant-operators of family-size farms, assistance to young and limited-resource farmers, aid to farmers suffering economic and natural disasters, and the development of water and conservation facilities. A longstanding guiding objective of FmHA has been the provision of credit to those farmers unable to obtain funds elsewhere at reasonable terms. It thus would be expected that FmHA would have a loan portfolio dominated by highly leveraged operators.

Table 18--Farmers Home Administration farmer program delinquencies, June 30, 1984

Farmer programs (individual loans)	Number of active borrowers (caseload)			Outstanding principal		
	Total	Delinquent		Total	Delinquent	
		Total	Proportion		Amount	Share of total
	Number		Percent	Million dollars		Percent
Farm ownership	123,390	28,610	23.2	6,696.3	301.8	4.5
Farm ownership, nonfarm enterprises	1,415	391	27.6	53.8	3.9	7.3
Operating loans, excluding youth	116,735	42,341	36.3	4,072.2	783.0	19.2
Operating loans, youth	2,299	671	29.2	8.2	2.0	24.4
Emergency disaster	125,029	52,662	42.1	9,938.0	3,374.2	34.0
Economic emergency	60,331	28,187	46.7	4,288.7	901.0	21.0
Recreation	226	66	29.2	13.9	1.4	10.0
Soil and water	16,853	4,808	28.5	297.2	29.5	9.9
Economic opportunity	577	501	86.8	.7	.6	95.5
Total	446,855	1/158,237	1/35.4	25,369.0	5,397.5	21.3

1/ Duplicated cases, because some borrowers have loans under several different programs. On June 30, 1984, there were 270,806 unduplicated borrowers under FmHA farmer programs, of which 93,643 (34.6 percent) were behind schedule in making payments.

Sources: (5, 6).

FmHA farmer program delinquencies are shown for June 30, 1984, in table 18. On that date, 35.4 percent of the caseload and 21.3 percent of the amount of outstanding principal were delinquent. Comparable figures for 4 years earlier on June 30, 1980, were 16.7 and 4.6 percent, respectively. The amount of delinquent principal increased from $827.6 million to $5.4 billion, an increase of 552 percent between June 30, 1980, and June 30, 1984. Almost 80 percent of the delinquent principal is accounted for by the economic emergency and economic disaster loan programs, and almost one-third of all delinquent principal is in in three States--Georgia, Mississippi, and Texas.

Despite the generally high delinquency rates, FmHA charge-offs (loan losses) have been held to a minimum. Actual FmHA charge-offs of principal and interest as a percentage of debt outstanding for fiscal 1983 were 0.681, 0.017, 0.098, and 0.164 for the respective farm operating, farm ownership, emergency disaster, and economic emergency loan programs.

Limited historical information is available regarding the discontinuation of farming by FmHA borrowers. Some 2.46 percent of farmer program borrowers gave up farming as a result of financial difficulties in fiscal 1984, compared with 2.78 percent in fiscal 1983 (table 19). The majority of these farmers left through unforced procedures. Of those who discontinued farming in fiscal 1984, 21.2 percent left due to foreclosure, compared with 18.1 percent in fiscal 1983 (table 19). FmHA foreclosed on only 0.13 percent of its farmer program borrowers in 1984, or 5.3 percent of those who discontinued farming. FmHA foreclosures declined from 1983. Bankruptcy preceded 16.7 percent of the discontinuations in fiscal 1984, down from 18.5 percent in fiscal 1983. Voluntary sales and conveyances to FmHA preceded over 60 percent of the borrower discontinuations.

Table 19--Farmers Home Administration farmer program borrowers discontinuing farming, fiscal years 1983-84

Borrower category	Fiscal year 1983		Fiscal year 1984	
	Number	Percent	Number	Percent
Active farmer program borrowers	271,099		273,197	
Total borrowers who discontinued farming due to financial difficulties	7,529	2.8	6,713	2.5
Discontinued borrowers who did so:				
Under bankruptcy	1,392	18.5	1,124	16.7
With FmHA foreclosure	615	8.2	356	5.3
With other foreclosure	742	9.9	1,066	15.9
With voluntary conveyances to FmHA	1,486	19.7	1,409	21.0
With transfer and assumption to others	627	8.3	571	8.5
With sales, other than foreclosure	2,667	35.4	2,187	32.6

Source: (6).

Life Insurance Companies

Life insurance companies had $599.2 billion in assets in 1982. Some $142.0 billion, or 24.1 percent of this total, were invested in mortgages of all types. Farm mortgages totaling $13.1 billion made up 2.2 percent of total life insurance company assets and 9.2 percent of their mortgage assets.

The delinquency rates--the number of loans delinquent as a percentage of all such loans in the category--as reported by the American Council of Life Insurance were lower for life insurance company farm mortgage loans than for their nonfarm counterparts throughout the 1970's. The farm delinquency rate first exceeded the nonfarm rate in June 1981 and has done so continuously since June 1982, with a peak rate of 3.88 percent in June 1984 compared with a nonfarm rate of 1.17 percent that same month. The farm mortgage rate of delinquency as a share of outstanding loans has exceeded the nonfarm rate continuously since June 1978. It soared to 10.38 percent by June 1984, a record high since the data series began in 1954. The nonfarm mortgage delinquency rate in terms of dollar value edged up slightly to 0.93 percent in June 1984.

The farm mortgage foreclosure rates, by number of loans, have exceeded the nonfarm rates since June 1979 and stood at 1.14 percent compared with a nonfarm rate of 0.16 percent in June 1984. Farm mortgage foreclosure rates, by amount of loans outstanding, have exceeded the nonfarm rates since June 1978. In June 1984, 2.97 percent of the amount outstanding for farm loans were in the process of foreclosure compared with 0.30 percent for nonfarm loans.

Summary of Lender Prospects

Farm lenders are already feeling the pressures of poor farm loan performance. Delinquencies, nonaccrual delinquencies, and charge-offs are all up sharply. Agricultural banks are considerably worse off than their nonagricultural counterparts by each of the measures cited. The number of problem agricultural banks reported by the FDIC is growing faster than the number of nonagricultural problem banks.

Bank failures are currently running at 10 times their average annual rate for the past three decades. Institutional lenders, depending on the proportions of their portfolios in farm loans, may not be able to absorb likely increases in the numbers and amounts of troubled farm loans over the next few years without severe problems, further increases in lender failure, and increases in the costs of credit to agricultural borrowers.

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(6) ______________. _Farm and Housing Activity Report_. Various issues.

Appendix table 1--Sources and uses of shortrun cash income by sales class and debt/asset ratio, 1983 1/

Item	Sales over $500,000			Sales of $250,000-499,999			Sales of $100,000-249,999		
	0-40 pct.	40-70 pct.	Over 70 pct.	0-40 pct.	40-70 pct.	Over 70 pct.	0-40 pct.	40-70 pct.	Over 70 pct.
	Dollars per farm								
Cash sales	994,684	999,851	1,080,748	302,364	322,963	310,273	139,626	148,146	146,427
+ Other cash income	32,340	57,143	60,860	12,661	17,077	27,190	8,161	9,803	8,931
= Gross farm income	1,027,024	1,056,994	1,141,608	315,025	340,040	337,463	147,787	157,949	155,35
- Operating expenses excluding interest	812,777	896,548	1,026,384	230,914	257,215	248,336	107,178	106,784	122,680
- Interest paid	63,570	108,533	119,674	26,170	48,201	61,961	13,217	32,996	29,679
= Net cash operating income	150,677	51,913	(4,450)	57,941	34,624	27,166	27,392	18,169	2,999
- Principal payments 2/	17,858	52,600	59,671	9,674	21,074	26,348	4,309	14,323	15,905
= Net cash farm income for family living expenses	132,819	(687)	(64,121)	48,267	13,550	818	23,083	3,846	(12,906)
+ Off-farm income	28,603	28,603	28,603	14,610	14,610	14,610	12,252	12,252	12,252
= Cash available for family living expenses	161,422	27,916	(35,518)	62,877	28,160	15,428	35,335	16,098	(654)
- Family living expenses 3/	20,938	20,938	20,938	20,938	20,938	20,938	20,938	20,938	20,938
= Family income surplus or (shortfall)	140,484	6,978	(56,456)	41,939	7,222	(5,510)	14,397	(4,840)	(21,592)
	Percent								
Surplus or (shortfall) as percentage of cash sales	14.1	0.7	(5.2)	13.9	2.2	(1.8)	10.3	(3.3)	(14.7)
Debt/asset ratio	9.2	52.8	100.7	14.6	52.0	100.4	11.1	52.2	98.0
Average interest rate	18.8	10.3	10.0	13.5	11.4	11.8	15.3	11.5	9.3

See footnotes at end of table.

continued--

Appendix table 1--Sources and uses of shortrun cash income by sales class and debt/asset ratio, 1983 1/--continued

Item	Sales of $50,000-99,999			Sales of $25,000-49,999			Sales of $10,000-24,999		
	0-40 pct.	40-70 pct.	Over 70 pct.	0-40 pct.	40-70 pct.	Over 70 pct.	0-40 pct.	40-70 pct.	Over 70 pct.
	Dollars per farm								
Cash sales	65,088	70,610	66,403	32,856	34,462	33,846	15,451	14,914	14,261
+ Other cash income	4,188	5,547	6,250	2,886	3,774	2,923	1,224	1,584	2,220
= Gross farm income	69,279	76,157	72,653	35,742	38,236	36,769	16,675	16,498	16,481
- Operating expenses excluding interest	52,331	55,800	56,718	30,891	34,406	33,603	16,525	23,128	23,621
- Interest paid	6,302	23,223	17,509	3,526	11,864	12,610	2,097	7,690	12,839
= Net cash operating income	10,643	(2,866)	(1,574)	1,325	(8,034)	(9,444)	(1,947)	(14,320)	(19,979)
- Principal payments 2/	2,294	9,892	10,347	1,163	5,071	7,294	527	3,736	3,736
= Net cash farm income for family living expenses	8,349	(12,758)	(11,921)	162	13,105	16,738	(2,474)	(18,056)	(25,786)
+ Off-farm income	11,253	11,253	11,253	12,987	12,987	12,987	16,589	16,589	16,589
= Cash available for family living expenses	19,602	(1,505)	(688)	13,149	(118)	(3,751)	14,115	(1,467)	(9,197)
- Family living expenses 3/	20,938	20,938	20,938	20,938	20,938	20,938	20,938	20,938	20,938
= Family income surplus or (shortfall)	(1,336)	(22,443)	(21,606)	(7,789)	(21,056)	(24,689)	(6,823)	(22,405)	(30,135)
	Percent								
Surplus or (shortfall) as percentage of cash sales	(2.0)	(31.8)	(32.5)	(23.7)	(61.1)	(72.9)	44.2	(150.2)	(211.3)
Debt/asset ratio	9.6	51.5	99.1	6.9	51.0	102.6	4.1	52.5	107.1
Average interest rate	13.7	11.7	8.5	15.2	11.7	8.6	19.9	10.3	11.1

See footnotes at end of table.

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Appendix table 1--Sources and uses of shortrun cash income by sales class and debt/asset ratio, 1983 1/--continued

Item	Sales of less than $10,000		
	0-40 pct.	0-70 pct.	Over 70 pct.
	Dollars per farm		
Cash sales	3,265	2,922	2,002
+ Other cash income	1,727	1,254	7,430
= Gross farm income	4,992	4,176	9,432
- Operating expenses excluding interest	8,270	10,330	12,880
- Interest paid	716	5,429	4,835
= Net cash operating income	(3,994)	(11,583)	(8,283)
- Principal payments 2/	272	2,585	2,650
= Net cash farm income for family living expenses	(4,266)	14,168	10,933
+ Off-farm income	20,502	20,502	20,502
= Cash available for family living expenses	16,236	6,334	9,569
- Family living expenses 3/	20,938	20,938	20,938
= Family income surplus or (shortfall)	(4,702)	(14,604)	(11,369)
	Percent		
Surplus or (shortfall) as percentage of cash sales	(144.0)	(499.8)	(567.9)
Debt/asset ratio	3.7	51.2	119.6
Average interest rate	13.2	10.5	9.1

1/ Amounts in parentheses are negative.

2/ One-twentieth of outstanding debt. Assumes debt is 75 percent real estate debt with 20 years remaining and 25 percent intermediate-term debt amortized over 5 years.

3/ Family living expenses are estimated as the 1983 median family income for nonmetropolitan counties.

Sources: 1983 Farm Production Expenditure Survey, (2), and (3).

Appendix table 2--Sources and uses of cash income by type of farm and debt/asset ratio, 1983 1/

Item	Cash grain			Field crop			Vegetable and melon		
	0-40 pct.	40-70 pct.	Over 70 pct.	0-40 pct.	40-70 pct.	Over 70 pct.	0-40 pct.	40-70 pct.	Over 70 pct.
	Dollars per farm								
Cash sales	83,764	115,826	120,999	68,579	95,055	139,445	193,797	121,193	609,282
+ Other cash income	8,171	12,030	16,573	5,511	15,680	12,017	4,073	10,975	13,721
= Gross farm income	91,935	127,856	137,572	74,091	110,735	151,462	197,871	132,169	623,003
- Operating expenses excluding interest	56,781	78,890	98,131	56,982	83,566	105,647	165,175	100,427	583,049
- Interest paid	10,376	30,954	30,628	6,488	16,459	21,971	8,860	14,876	50,147
= Net cash operating income	24,778	18,012	8,813	10,621	10,710	23,844	23,836	16,866	(10,193)
- Principal payments 2/	3,384	13,5770	15,733	1,597	7,129	10,826	2,419	7,336	26,448
= Net cash farm income for family living expenses	21,394	4,442	(6,920)	9,024	3,581	13,018	21,417	9,530	(36,641)
+ Off-farm income	14,484	14,484	14,484	16,411	16,411	22,222	22,222	22,222	22,222
= Cash available for family living expenses	35,878	18,926	7,564	25,435	19,992	29,429	43,639	31,752	(14,419)
- Family living expenses 3/	20,938	20,938	20,938	20,938	20,938	20,938	20,938	20,938	20,938
= Family income surplus or (shortfall)	14,940	(2,012)	(13,374)	4,497	(946)	8,491	22,501	10,814	(35,357)
	Percent								
Surplus or (shortfall) as percentage of cash sales	17.8	(1.7)	(11.0)	6.6	(1.0)	6.1	11.6	8.9	(1.1)
Debt/asset ratio	12.2	51.4	99.7	9.8	50.4	101.3	10.6	51.4	131.8

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Appendix table 2--Sources and uses of cash income by type of farm and debt/asset ratio, 1983 1/--continued

Item	Fruit and nut			Nursery and greenhouse			General crop		
	0-40 pct.	40-70 pct.	Over 70 pct.	0-40 pct.	40-70 pct.	Over 70 pct.	0-40 pct.	40-70 pct.	Over 70 pct.
	Dollars per farm								
Cash sales	108,237	81,818	205,375	220,380	(d)	(d)	4,449	8,259	4,495
+ Other cash incomes	3,641	7,451	5,743	171	(d)	(d)	352	685	447
= Gross farm income	111,879	89,269	211,118	220,552	(d)	(d)	4,851	8,944	4,942
- Operating expenses excluding interest	86,254	81,171	164,962	149,511	(d)	(d)	11,627	19,309	15,291
- Interest paid	9,977	17,348	31,042	5,206	(d)	(d)	1,088	6,188	7,299
= Net cash operating income	15,648	(9,250)	15,114	65,835	(d)	(d)	(7,864)	(16,553)	917,648)
- Principal payments 2/	2,942	9,363	17,428	2,250	(d)	(d)	406	3,026	4,307
= Net cash farm income for family living expenses	12,706	(18,613)	(2,314)	63,585	(d)	(d)	(8,270)	(19,579)	(21,955)
+ Off-farm income	28,979	28,979	28,979	20,940	(d)	(d)	20,775	20,775	20,775
= Cash available for family living expenses	41,685	10,366	26,665	84,525	(d)	(d)	12,505	1,196	(1,180)
- Family living expenses 3/	20,938	20,938	20,938	20,938	(d)	(d)	20,938	20,938	20,938
= Family income surplus or (shortfall)	20,747	(10,572)	5,727	63,587	(d)	(d)	(8,433)	(19,742)	(19,758)
	Percent								
Surplus or (shortfall) as percentage of cash sales	19.2	(12.9)	2.8	28.8	(d)	(d)	(187.4)	(239.0)	(439.6)
Debt/asset ratio	8.4	55.8	107.0	2.0	(d)	(d)	4.5	52.2	122.2

See footnotes at end of table.

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Appendix table 2--Sources and uses of cash income by type of farm and debt/asset ratio, 1983 1/--continued

Item	General livestock			Dairy		
	0-40 pct.	40-70 pct.	Over 70 pct.	0-40 pct.	40-70 pct.	Over 70 pct.
	Dollars per farm					
Cash sales	70,677	143,917	149,631	115,498	144,742	142,109
+ Other cash income	6,688	8,893	20,876	1,936	2,834	2,511
= Gross farm income	77,365	152,810	170,507	117,434	147,576	144,620
- Operating expenses excluding interest	68,521	135,335	157,088	84,825	108,027	109,682
- Interest paid	6,596	28,195	24,704	7,437	24,457	34,943
= Net cash operating income	2,248	(10,720)	(11,285)	25,172	15,092	(5)
- Principal payments 2/	2,180	12,171	12,953	2,674	11,090	16,283
= Net cash farm income for family living expenses	68	(22,891)	(24,238)	22,498	4,002	(16,288)
+ Off-farm income	18,893	18,893	18,893	7,621	7,621	7,621
= Cash available for family living expenses	18,961	(3,998)	(5,345)	30,119	11,623	(8,667)
- Family living expenses 3/	20,938	20,938	20,938	20,938	20,938	20,938
= Family income surplus or (shortfall)	(1,977)	(24,936)	26,283	9,181	(9,315)	(29,605)
	Percent					
Surplus or (shortfall) as percentage of cash sales	(2.8)	(17.3)	(17.6)	7.9	(6.4)	(20.8)
Debt/asset ratio	8.2	52.9	96.9	12.7	53.3	100.4

Item	Poultry and egg			Other livestock		
	0-40 pct.	40-70 pct.	Over 70 pct.	0-40 pct.	40-70 pct.	Over 70 pct.
	Dollars per farm					
Cash sales	223,826	254,198	291,823	72,118	66,366	58,669
+ Other cash income	441	6,311	4,216	7,084	6,709	500
= Gross farm income	224,267	260,509	296,039	79,202	73,075	59,169
- Operating expenses excluding interest	177,508	221,942	278,270	97,184	123,992	50,794
- Interest paid	4,257	10,798	17,724	3,817	26,062	7,061
= Net cash operating income	42,502	27,769	45	(21,799)	(76,979)	1,314
- Principal payments 2/	1,095	4,986	9,498	1,598	11,846	3,472
= Net cash farm income for family living expenses	41,407	22,783	(9,453)	(23,397)	(88,825)	(2,158)
+ Off-farm income	14,012	14,012	14,012	23,136	23,136	23,136
= Cash available for family living expenses	55,419	36,795	4,559	(216)	(65,689)	20,978
- Family living expenses 3/	20,938	20,938	20,938	20,938	20,938	20,938
= Family income surplus or (shortfall)	34,481	15,857	(16,379)	(21,199)	(86,627)	40
	Percent					
Surplus or (shortfall) as percentage of cash sales	15.4	6.2	(5.6)	(29.4)	(130.5)	.1
Debt/asset ratio	7.8	51.5	117.2	5.7	53.5	132.7

(d) = Data not available due to disclosure rules.

1/ Amounts in parentheses are negative.

2/ One-twentieth of outstanding debt. Assumes debt is 75 percent real estate debt with 20 years remaining and 25 percent intermediate-term debt amortized over 5 years.

3/ Family living expenses are estimated as the 1983 median family income for nonmetropolitan counties.

Sources: 1983 Farm Production Expenditure Survey, (2), and (3).

Mr. RUSSELL. I think it is totally inaccurate and false to say that the Economic Research Service is not on top of this credit issue. Our economists are as knowledgeable as any Iowa State economists on the farm financial situation.

Senator ANDREWS. Iowa State isn't all that bad. But then the major part of the question is, why the big hoorah on radio and on television out of the White House about the $7 billion cost of what we did last week? The figures we get on the Budget Committee say the bulk of that will be recaptured.

Mr. RUSSELL. Senator Andrews, I think there is a difference between how CBO is costing out the proposal and how the administration is costing it out.

First of all, we are showing a net increase in outlays for fiscal 1985 of between $7 and $9 billion. You're correct in saying that some of that will be repaid in fiscal year 1986.

The problem is that we are assuming that $1 to $2 billion of that is likely not to be recovered. There will be forfeitures on those. There is also a difference in the assumptions of CBO and those of the Department. CBO did not assume any increase in participation under the program. I think it is inaccurate to state that there will not be an increase in program participation given this new program that the Congress will be sending down to the White House this week.

Second of all, they did not include advance deficiency payments in their assumption when they costed out the program.

Third, they did not include any diversion payment in there.

Senator ANDREWS. What you are saying then is that the additional costs are going to come about because more farmers sign up for the programs. Yet I heard Secretary Block urging farmers to sign up for the programs a month or two ago. You can't have it both ways.

In your first statement, you also mentioned what the cost of the program will be if the farmer can't pay back the loan. Now if the farmer pays back the loan, then what you say is similar to what CBO says, that there is no cost impact to the Federal Government.

You are saying if they forfeit on the loan, costs will rise. We are hoping that they are not going to forfeit. We are hoping that the process is such that if they get their spring planting loans, they will be able to repay. So, barring forfeitures, it is indeed a revenue-neutral provision, which you said.

Now, on the other side of the coin, how can you fault what we have done, if it increases the signup in the program that your very Secretary has told the farmers that they ought to sign up for?

Secretary BLOCK. Senator, we are not faulting the fact that it would enhance signup.

Senator ANDREWS. Your compatriot said that the cost is because we are going to have additional signup.

Secretary BLOCK. No; he didn't fault that, though. He said that the very fact that there would be more signup means there would be more cost. We would have to admit that is true. We do want signup, but it would be more cost. I don't think that can be argued against.

Senator ANDREWS. You have just testified, if I heard properly, that the total additional cost of the amendment we put through, will be as a result of possible additional signup in the program and whatever forfeitures.

Secretary BLOCK. And the forfeitures. I think that is probably accurate there.

Senator ANDREWS. Other than that, there is no cost, it is a revenue-neutral program.

Mr. RUSSELL. Well, again, we are assuming that the market price is not going to go up to the point——

Senator ANDREWS. That's right.

Mr. RUSSELL [continuing]. Where, with the increased participation, you are going to have no forfeitures. We are assuming that forfeitures will exist.

Senator ANDREWS. I just want to get that very clearly on the record, because I am getting sick and tired of listening to the $7 billion budget busting amendments that we attached to the famine relief bill.

I appreciate my chairman giving me the time in the press of his busy committee action to get that point across.

Secretary BLOCK. Mr. Chairman, I don't want to dwell on this subject, but Senator Andrews is making sure that everyone understands the point that he is making.

I think everyone should also understand that this program is designed to provide operating money. What we are really looking at, in this legislation, is converting a harvest loan program into an operating production loan program. It subverts the whole intent of the Commodity Credit Corporation's harvest loan program.

The farmers take their money in the spring instead of in the fall, and then when fall comes, they won't have their money. They will have already used it. There is no means test. It opens it up to anyone. Anyone can get it, whether they have a need for money or not. Those who can go right to the bank and borrow the money still qualify for the advance, so you always run the risk of having the Commodity Credit Corporation put the money out in advance to farmers who don't need it. Farmers who don't need the money can do anything they want with it.

The program is not limited to one or two crops. It is virtually everything, corn and wheat and rice and cotton and tobacco, the whole thing. It just opens it all up so that everyone can come in and get a harvest loan before the crop is planted. I just think that is an unacceptable subversion of the whole program.

Senator ANDREWS. Mr. Secretary, I agree with you on that. I am one of those who feels we shouldn't tamper with commodities loans. I am supported in my position by the NFO and the National Farmers Union.

Because we felt very strongly, Mr. Secretary, I think it is incumbent on us to point out that we limited this to only a 1-year operation. What has happened, we now have the cow in the ditch. We have an emergency situation. We have a 1-year shot to secure funds in the field in order to get the crops planted.

The key thing is, it is limited to 1 year and, therefore, is not going to subvert the commodities loan program.

The second thing is—and that is the point that we made earlier, that it is, indeed and in fact, revenue neutral.

Thank you, Mr. Chairman.

Senator COCHRAN. Senator Burdick, we have completed our opening statements and the Secretary is about to present his testimony. If you have any opening statements or comments before he proceeds, I will recognize you for that purpose at this time.

Senator BURDICK. No; I have no opening statements. I have some questions.

Senator COCHRAN. Well, I do, too. We will go on then to the Secretary's statement.

Senator BURDICK. All right.

Senator COCHRAN. Mr. Secretary, you may proceed.

CURRENT AGRICULTURAL CREDIT SITUATION

Secretary BLOCK. Thank you Mr. Chairman. It is a pleasure to be here this morning and have an opportunity to present to this subcommittee our budget proposal and a review of our farm program that this administration is proposing.

I want to start off by acknowledging the tough times in agriculture. I have met, within the last 3 weeks, with representatives from several States that have been in town. I met yesterday with farm leaders from different parts of the United States. I don't think anyone appreciates the difficulty in the country and is any more aware of that problem than I am.

I also would submit that the administration has a debt restructuring program that has been revised twice to ensure that it meets all the desires of the banking institutions. I would submit that it will work and it is going to be a great help to farmers. The Farmers Home Administration will have adequate funds to meet the needs of our qualified borrowers this spring.

It is a difficult time right now, and I appreciate that there may be about 15 percent that are having a hard time finding credit. However, I believe these new programs will provide adequate assistance to the farmers.

The banking institutions will start to reach out and appreciate that the Federal Government isn't going to bail out everything that they would like to see us bail out, so they are going to have an obligation to do something.

The States are starting to do some things. I think that is an encouraging sign. Some States are putting out money at a lower interest rate, and some States are providing personnel to help the Farmers Home Administration. Some States are considering the possibility of lowering property taxes to help farmers.

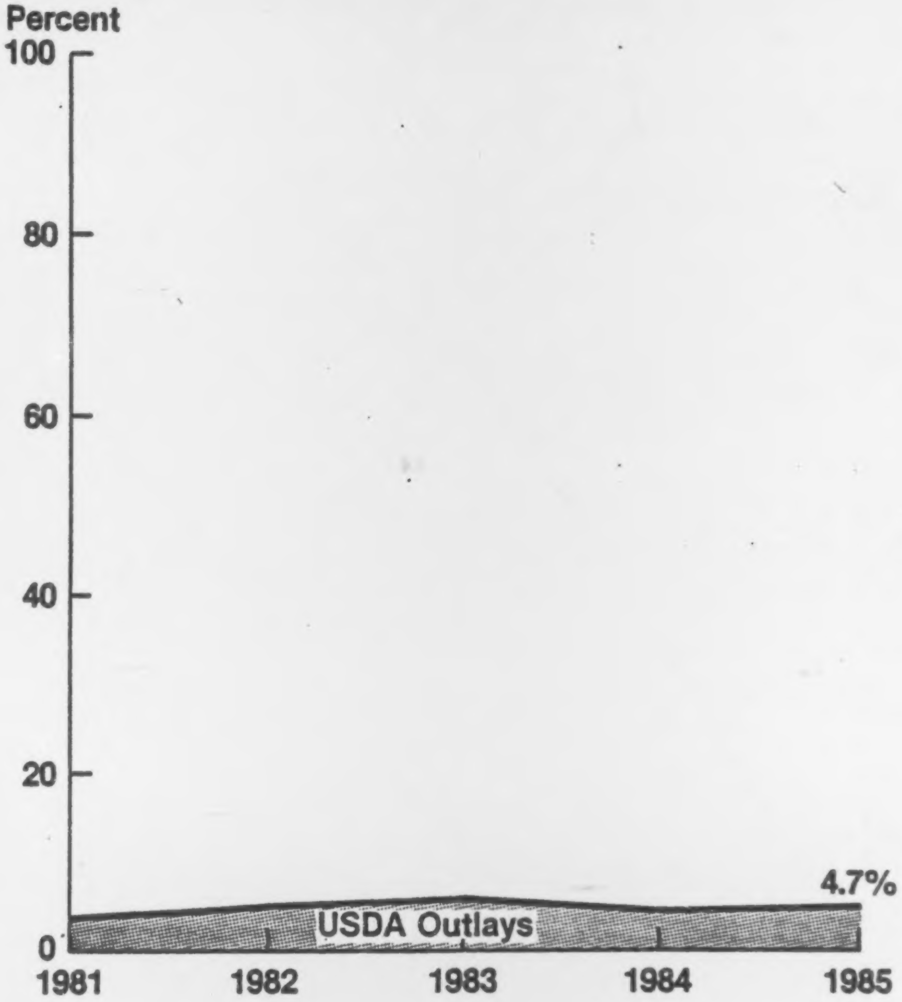
All of these are positive signs that indicate that the whole country is pulling together to address a problem. I think the only way it can be successfully addressed is if it is done cooperatively as appears to be the case now.

FISCAL YEAR 1986 BUDGET

I want to go through this series of charts, if I may. The first chart points out effectively that the Department of Agriculture budget, 4.7 percent, is not a big percentage of the total Federal budget. It is important because every department's budget is important, but the total is not a huge amount of the total Federal budget.

[The chart follows:]

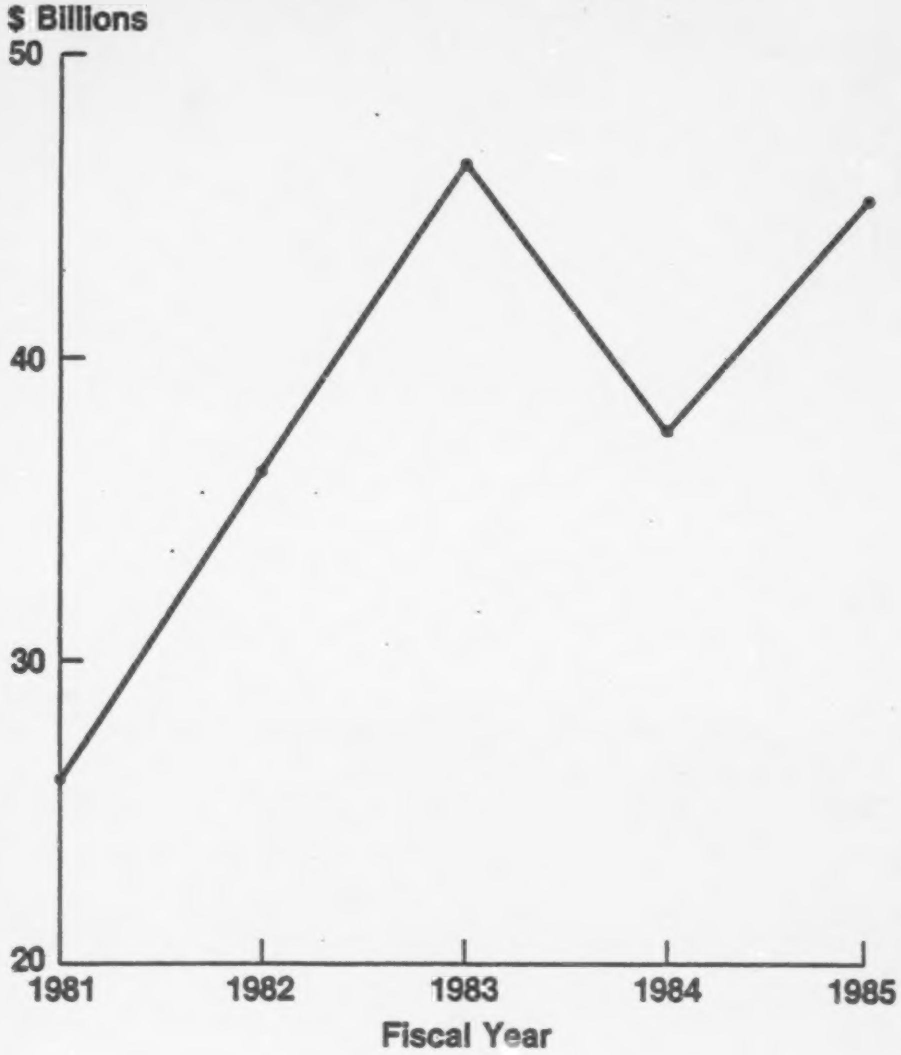
USDA Percentage of Federal Outlays FY 1981-1985



DEPARTMENTWIDE OUTLAYS

I do think we should be aware that in the last few years, the costs or the budgetary outlays of the Department of Agriculture have increased dramatically. In the seventies, they were around $20 billion and below, but now, as we are into the eighties, they are as high as $45 billion and have increased dramatically.

[The chart follows:]

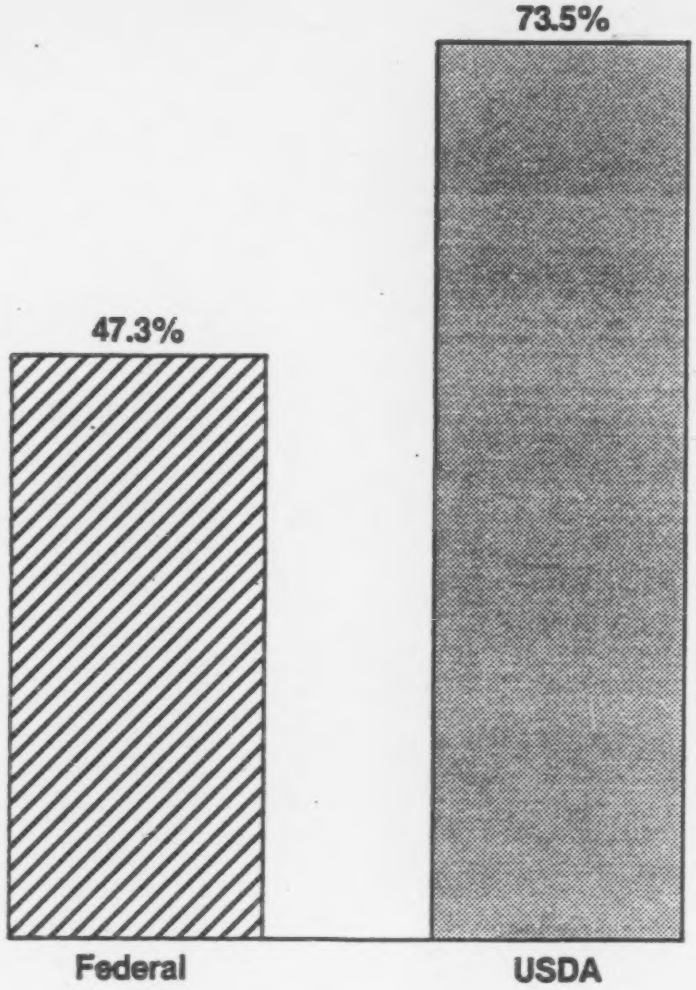


USDA Outlays FY 1981-1985

OUTLAY GROWTH

Outlays at the U.S. Department of Agriculture during the period 1981 to 1985 have increased 73.5 percent. The outlay growth for the total Government was 47.3 percent. So you can see that the outlays at USDA have gone up substantially faster than the rest of the Government outlays.

[The chart follows:]



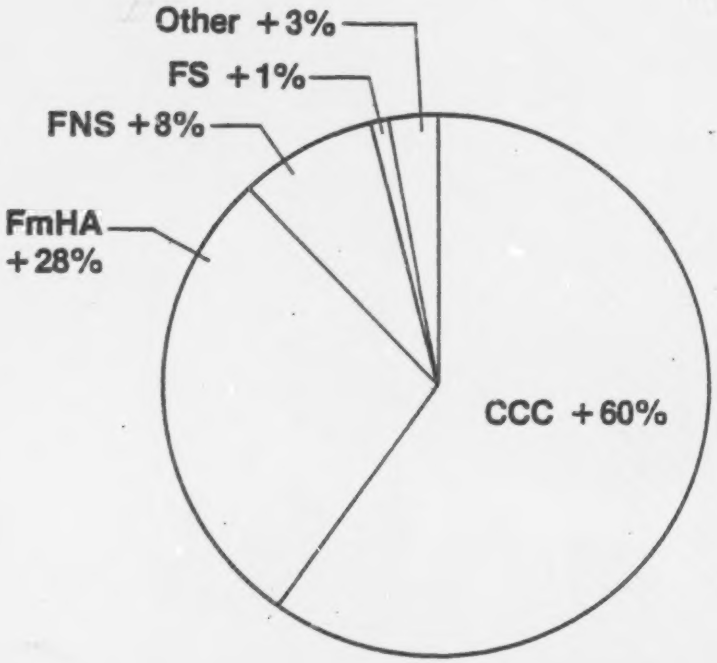
Outlay Growth FY 1981-1985

Federal vs. USDA

ALLOCATION OF INCREASES

The obvious question is, of course, where did we spend that money? We spent 60 percent of the increase on the Commodity Credit Corporation for direct payments and loans, and 28 percent in the Farmers Home Administration. Those are the two main areas where the money was spent.

[The chart follows:]



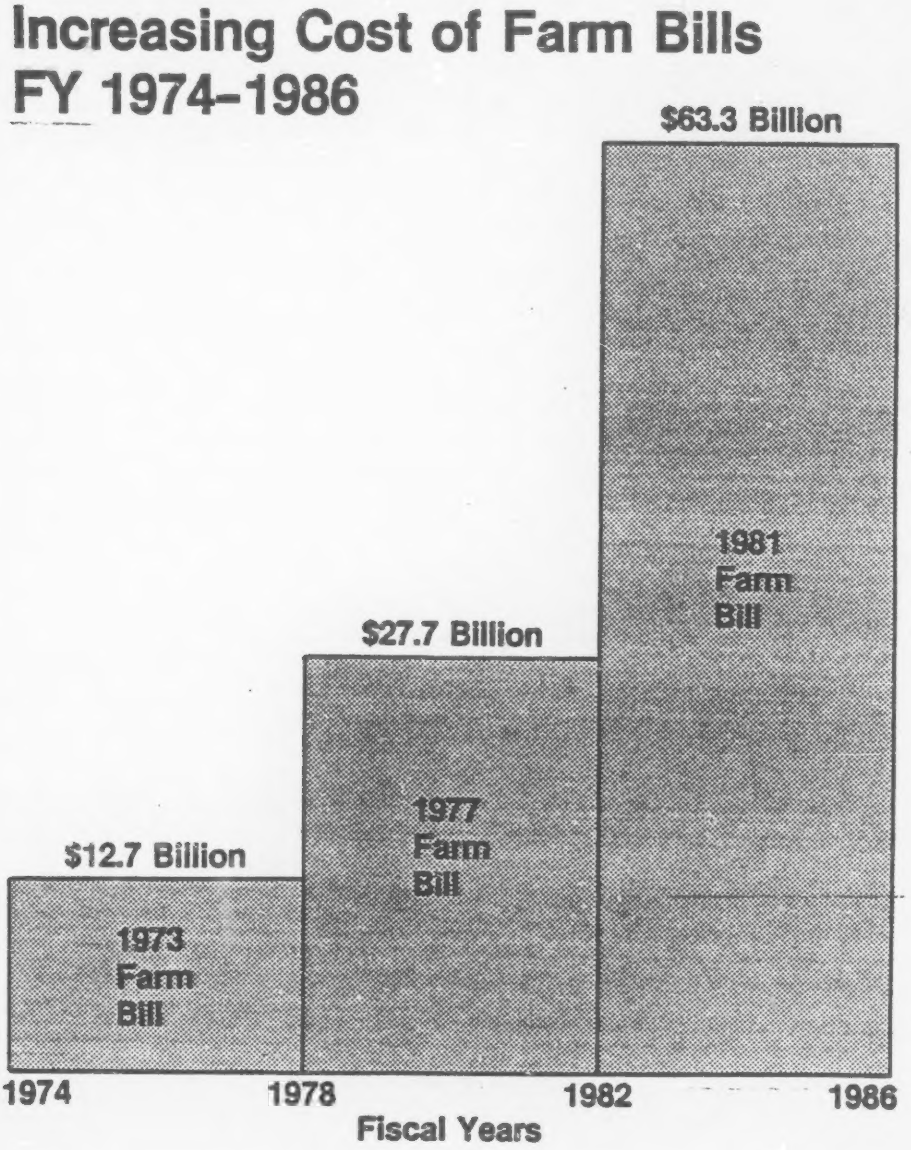
$61 Billion USDA Outlay Increase FY 1981-1985

COST OF FARM BILL

Now let's look at the farm program. In the first two charts, I was talking about total USDA outlays. Now I am talking about the farm program, which is a portion of our budget, Mr. Chairman, as you know. In 1974 through 1978, farm programs cost $12.7 billion. In 1978 through 1982, they cost $27.7 billion. In 1982 through 1986, they cost $63.3 billion. It is like a series of stairsteps.

I would submit to the committee that we cannot take another step up to $120 billion, which is kind of the way this incline has been going, to date. We need to get control of the spending in some way, some kind of finite cost control.

[The chart follows:]



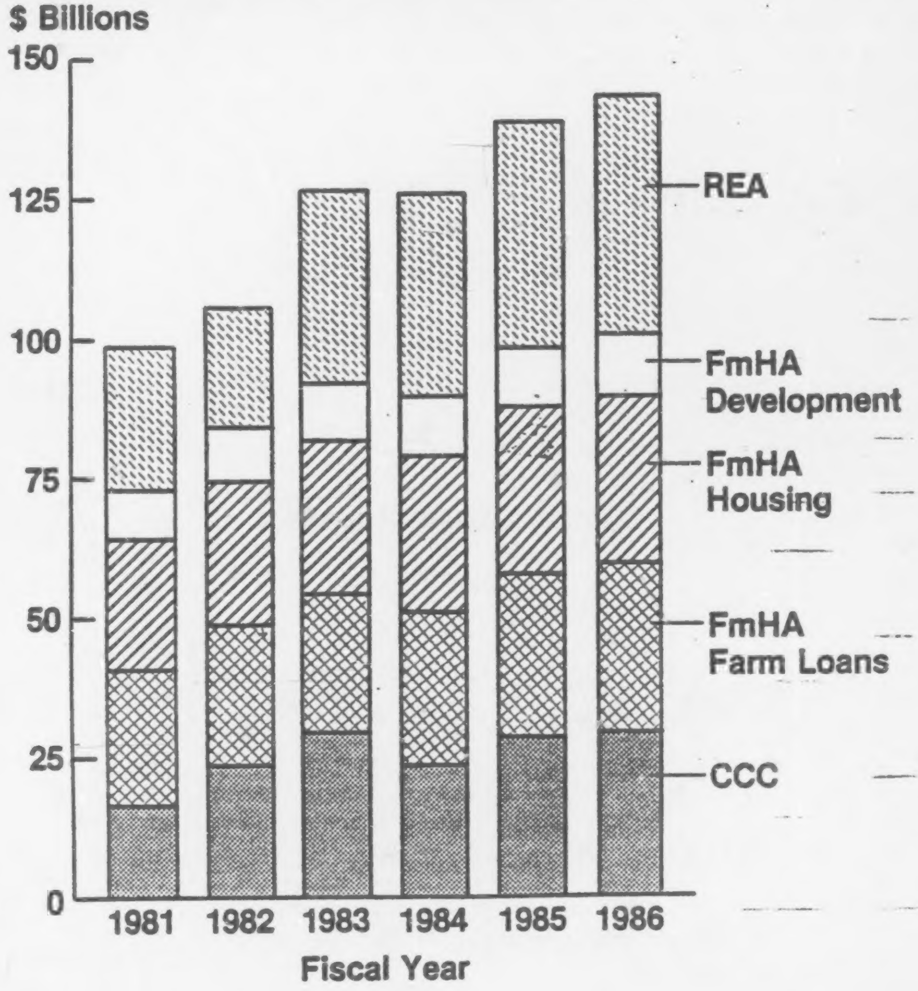
LOAN PORTFOLIO

Now, I want to address, very quickly, the loans we have out. I know there is a lot of concern about not making new loans for watershed projects, small community development, and water and sewer projects, home building, land purchases—all areas that we have proposed to cut back.

But you need to look and see what has happened. In 1981 we had $100 billion in outstanding money. These loans included both direct loans and those that the Government guaranteed. Of course, we are responsible for both. Today that $100 billion has increased to the range in 1986 of $140 billion.

[The chart follows:]

Loans Outstanding by Program or Agency



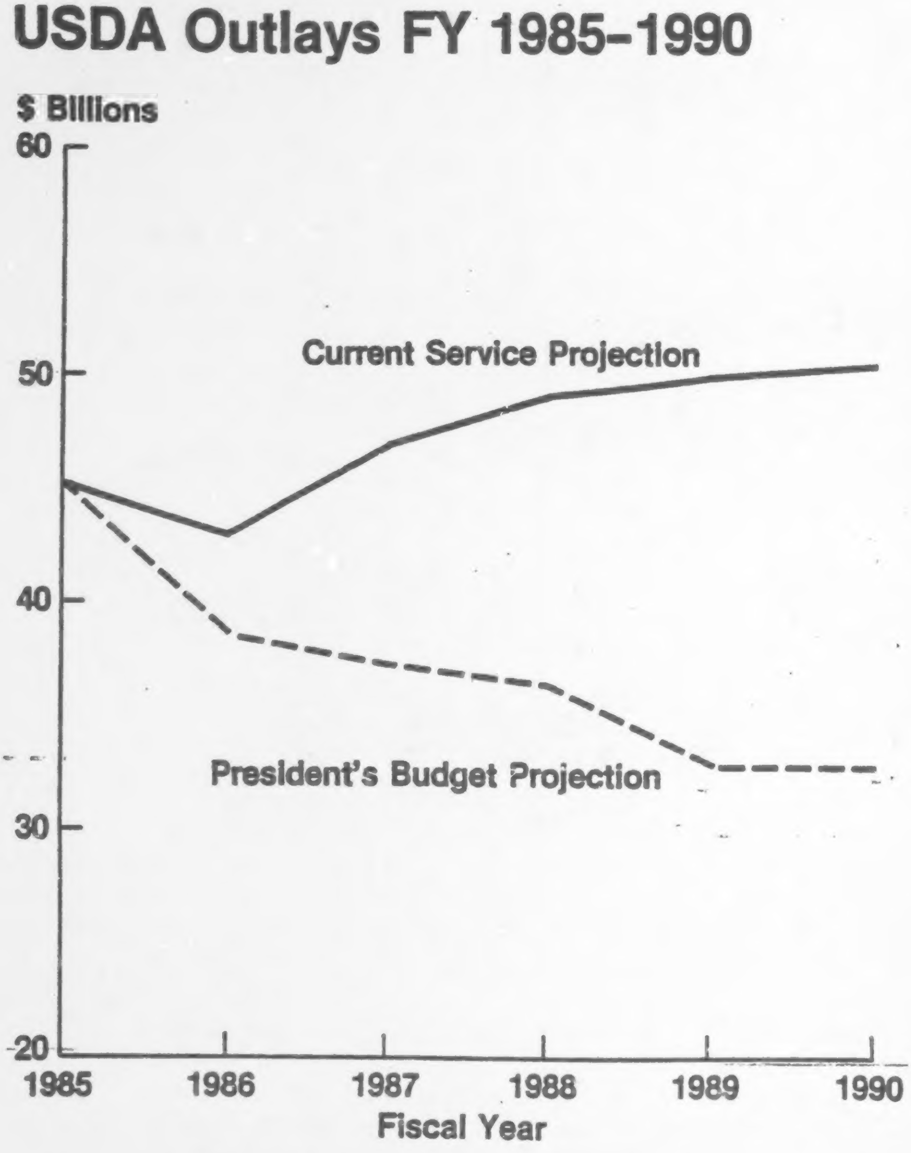
I submit that if we don't cut back on the amount of money that we are putting out in direct or guaranteed loans, we will continue to see this growth. The loan portfolio of USDA has continued to grow and will reach $200 billion. I submit that we just cannot allow this to happen.

The reason why it keeps growing is that loans are being made faster than they are being repaid. So although it may seem harsh to some that we suggest that some of these programs be cut back or curtailed or ended, the purpose is to get control of the amount of money that the Federal Government has spread out across the country.

FIVE YEAR COST PROJECTIONS

If we stay with the current farm program and current services budget, outlays would be up to $50 billion. If we accept the President's budget, then our cost will come down in the range of $33 billion, when you get out to 1989. It comes down to about $37 billion in 1986. Even when you get down in the range of $33 billion, you still have a substantial budget for USDA.

[The chart follows:]



Senator COCHRAN. Let me ask you, in connection with that chart, is the red line there what we would have in outlays if we were to have a freeze in effect of all USDA programs at current levels?

Secretary Block. It would be the current services estimate. It shows a continuation of current services as they are. That is what would happen, if the current farm program would be extended.

Senator Cochran. OK. That figure again is what now?

Secretary Block. It goes up.

Senator Cochran. The outlays would go up if there were a freeze. Is that what you are saying?

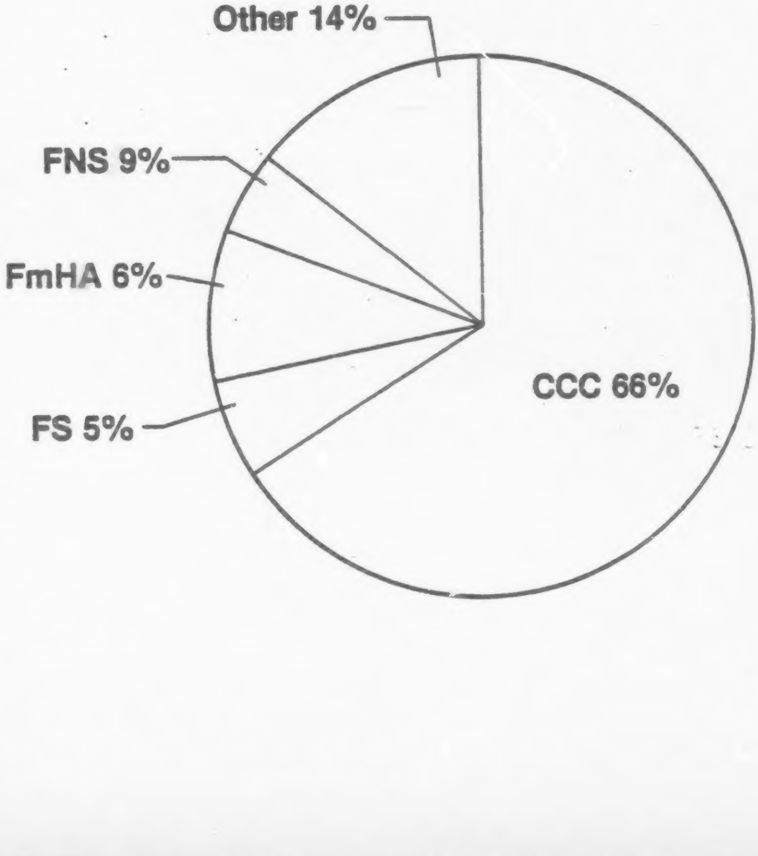
Secretary Block. Well, if you froze the programs as they are, yes. If you froze the programs as they are written, yes. That is because some of those programs are effectively entitlements.

ALLOCATION OF PROPOSED REDUCTIONS

If we adopt the President's budget for the U.S. Department of Agriculture, we will reduce our outlays by some $60 billion between 1985 and 1990 and the biggest amount of the reduction will be the Commodity Credit Corporation area of cost. The rest is kind of evenly divided between the other areas of the Department.

[The chart follows:]

$60 Billion USDA Reductions
FY 1985-1990



COST RANGE ESTIMATES OF FARM BILL

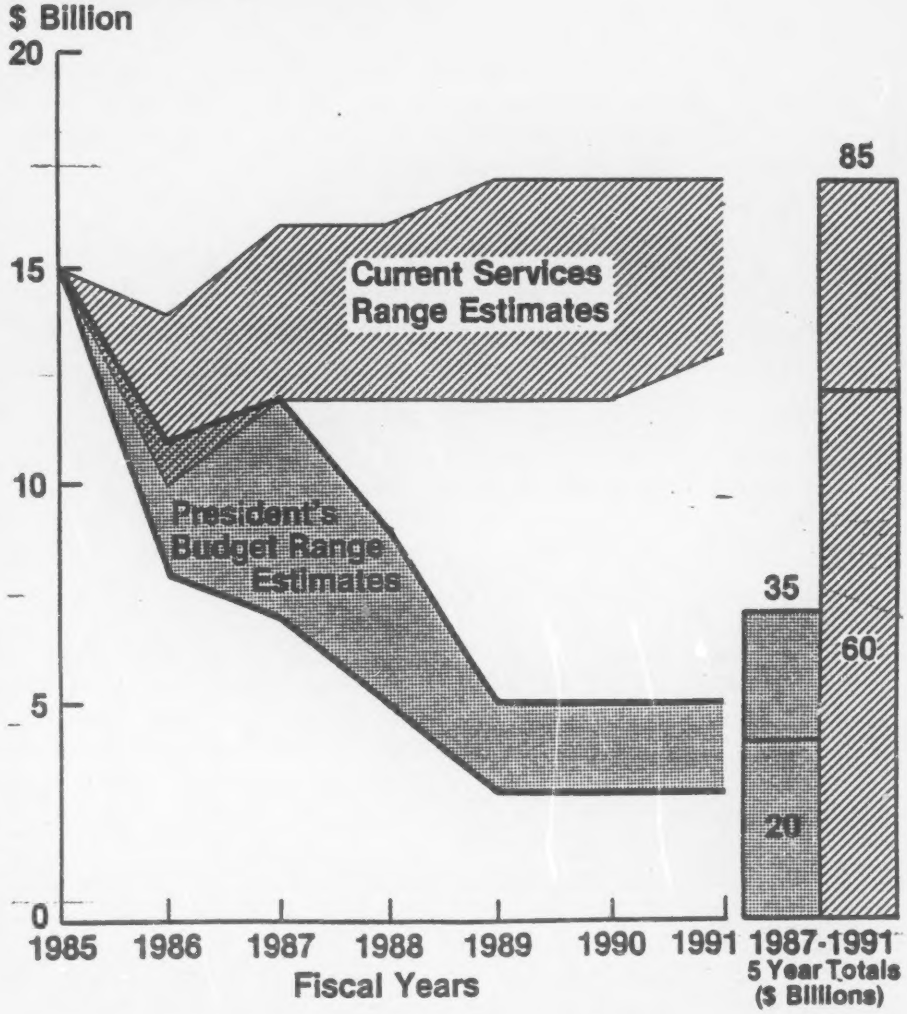
Now the cost estimate of the 1985 farm bill is what I have here. This is not total budget, Mr. Chairman; this is just the farm portion of the budget. If we stay with current services or just extended the current farm bill, the costs would be in this range here. It would look something like that.

If we go with the President's farm program proposal, it would come down in this range, by 1989, by $3 to $5 billion. Over this timeframe, the President's farm program, which is a program which would provide for less government obligation, we would spend $20 to $35 billion on farm programs.

If we don't make any changes and were to just extend the current farm program, we would likely spend in the range of $60 to $85 billion. There is about one-half as much or something like that in the administration's proposal.

[The chart follows:]

Cost Estimates for the 1985 Farm Bill



Senator COCHRAN. Let me ask you a question about that chart. Why is there such a substantial reduction in outlays between 1985 and 1986, if current services were simply continued and then there is a sharp increase from 1986 to 1987? What accounts for that? Why doesn't it continue to track a downward course, or why isn't it effecting a more level amount of funding?

Secretary BLOCK. I will let Mr. Russell handle that.

Mr. RUSSELL. Mr. Chairman, the fiscal 1985 cost reflects the 1984 crop year. Of course, when we go up to fiscal year 1986, that reflects the 1985 crop year. It is because of the difference in the size of the crops that we are projecting for the 1985 crop year—obviously, the crop just being planted now.

Also, we have a series of advance deficiency payments and diversion payments which are included in the fiscal 1986 number which were not included in 1985. That could make a difference.

Senator COCHRAN. OK.

Secretary BLOCK. In fact, it is about 2 billion dollars' worth of advance payments, if I am not mistaken. That makes a big difference.

Mr. RUSSELL. If you straight-lined out the existing farm program, assuming we had a continuation of current law, it will be about $15 billion a year annually.

CREDIT PROGRAMS

Secretary BLOCK. These are the real credit programs. As I said earlier, we are suggesting that we reduce the amount of money that we put out in loans, either guaranteed or direct, to get control of this loan portfolio.

If we stay with current services, we will continue to put out in the range of $11 to $13 billion every year in direct and also guaranteed loans. That means that the loan portfolio will continue to grow, without any question.

If we cut back on the amount of money that we are putting out the door, as our budget proposes, then the amount that we will put out is indicated here. It drops down to about $4.5 billion.

Senator ABDNOR. How long a period for that drop, that big one?

Secretary BLOCK. In 1986, we will put out $4.5 billion instead of $11 billion, effectively, something like that, in direct and guaranteed loans.

I don't know if you saw the other chart, Senator Abdnor? Did you see that earlier chart?

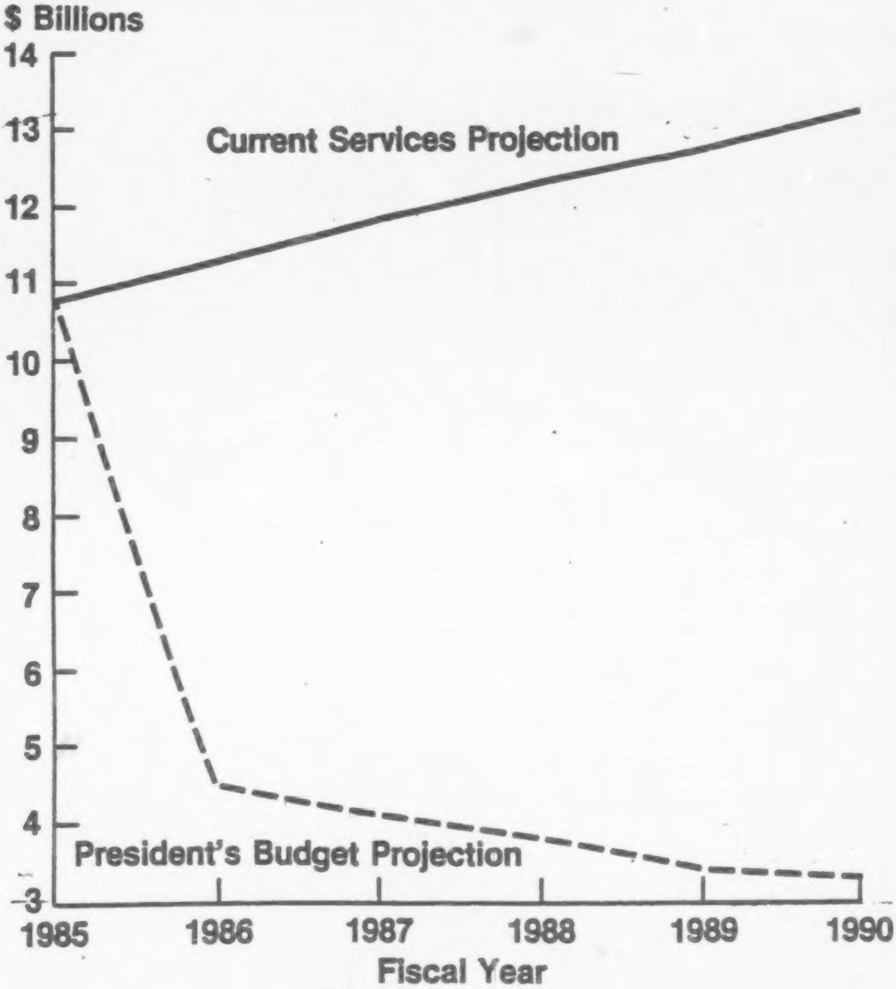
Senator ABDNOR. Maybe not.

Secretary BLOCK. The different kinds of loans we have—CCC, Farmers Home, housing development, and REA—it shows how the portfolio has continued to increase. I am saying that if we don't quit shoveling the money out, that portfolio is just going to keep going up.

Now it is a conscious decision that we have to make, because it doesn't come in as fast as it goes out. It will just keep going up and we are headed to $200 billion.

[The chart follows:]

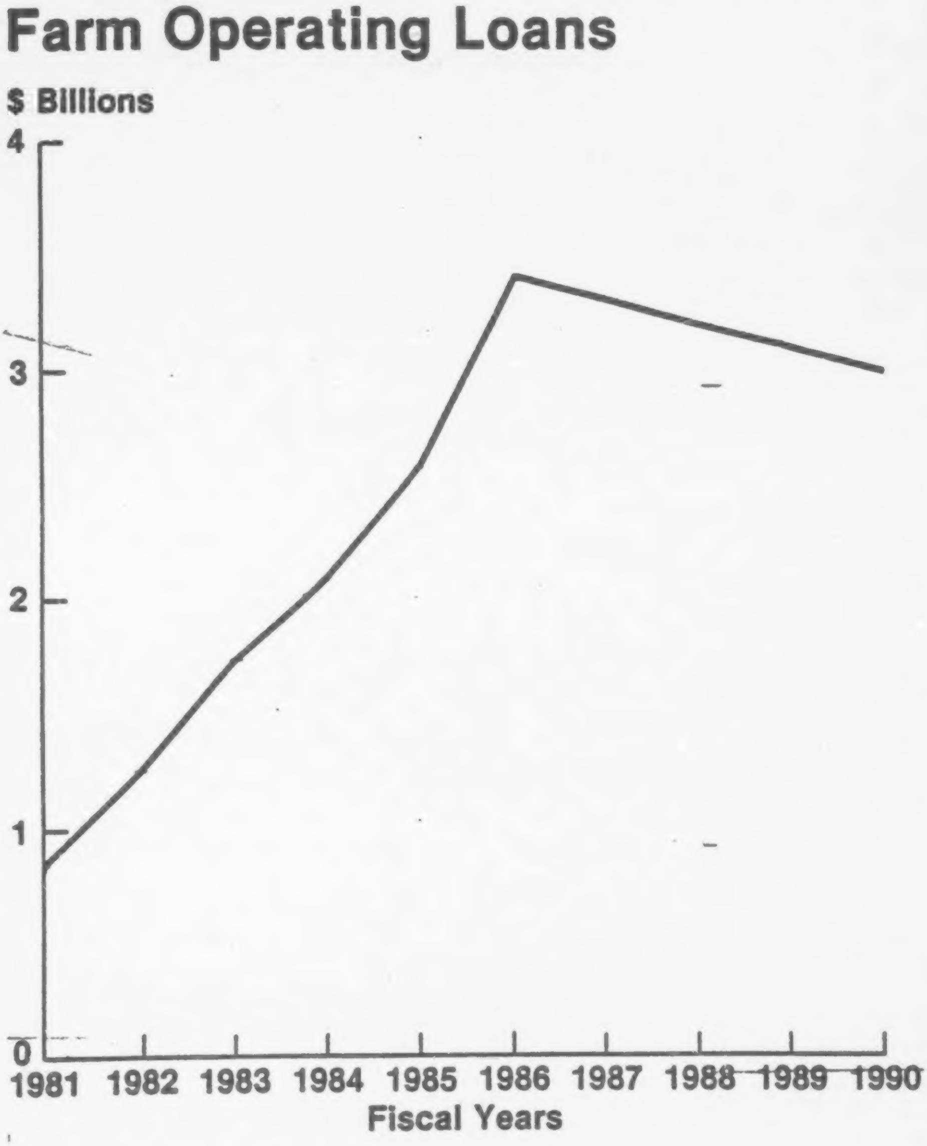
Rural Credit (FmHA and REA) New Loans FY 1985–1990



OPERATING LOANS

The one area where we do intend to keep a reasonably high level of credit extensions each year is in the area of farmers' operating credit, because times are tough. We want to make sure we can stay with this one, anyway. In that case, those loans will become guaranteed loans rather than direct loans, however.

[The chart follows:]

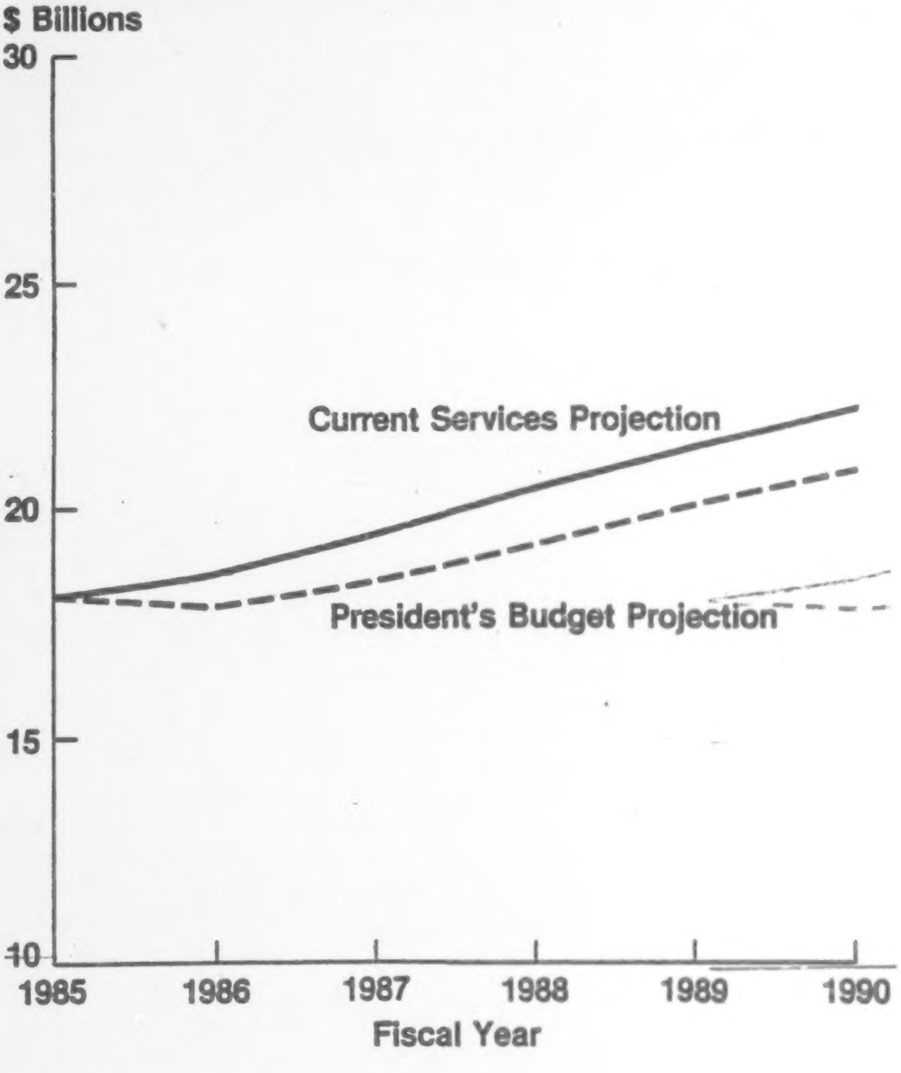


NUTRITION PROGRAMS

In the Food and Nutrition Service, there is a little difference here between the President's budget and current services. That difference that you see is that we would propose to charge the children that are getting a paid lunch at school to pay the additional 25 cents. Those children are the ones at 185 percent of the poverty level and above. Those are children from families of four that have an income of about $19,000.

[The chart follows:]

FNS Budget Authority



OTHER PROGRAM CUTS

There are other programs that are being curtailed and cut back, as you know. The conservation program will be retained. Our budget proposal retained the technical assistance to our farm programs, our conservation programs and soil mapping, but would end the cost sharing ACP programs, and would end the watershed programs.

In the case of the Forest Service, we proposed to cut less board feet, which would provide some savings. Regarding meat and poultry inspection, we are looking to charge a user's fee there to recover the cost—at least most of the cost—of meat and poultry inspection.

In the REA, by 1990, we would propose to have REA borrowers obtaining their money from the commercial sector, the private sector, rather than the Federal Government.

[The chart follows:]

Discretionary Programs

- Conservation Programs
- Forest Service
- Research
- Meat and Poultry Inspection
- REA

MARKET-ORIENTED FARM POLICY

Now, Mr. Chairman, just one other note or two. There are some reasons for moving toward a more market-oriented farm program policy beyond the budget considerations. The budget considerations are compelling. However, there are some other good reasons.

It is my belief that the farm programs that we have had, have in many ways been the ultimate in a cheap-food policy which has worked to the detriment of the American farmer. I would ask just how else we could describe Government policies that have directed excessive resources into agriculture. Those Government practices have ultimately attracted those resources in and depressed prices for the family farmer. All the time this was done under the guise of help for that farmer. I think we have put the family farmer into a pretty tough situation.

Low-interest loans are wonderful. We all like to get low-interest loans. When one farmer gets a low-interest loan to build a cattle barn or hog barn or expand something, he is doing that in competition with some family farmer down the road, or he is doing that in competition with another farmer. So you get more production than you might have gotten otherwise.

Rigid price supports have encouraged production both in the United States and in other countries. There again, Federal involvement in agriculture has sent false signals.

We have some tax laws in this country—I know Senator Abdnor is very well aware of those—that have encouraged outside capital into agriculture at the disadvantage of the family farmer, and they need to be addressed. They are not in our budget but are of concern to those of us who are interested in agriculture.

The grain reserve program: It is fine to have that grain in until we start realizing that it is a damper on price, as it puts a lot of pressure on our prices.

We have a Government purchase program for dairy. The Government is buying up the surpluses, and the dairy industry knows that. The dairy industry, unfortunately, is quite happy—in some quarters, anyway—about that, because when you know that the Government is going to buy your surplus, you don't have to go out and figure new ways to sell and market and innovate new ideas to sell cheese or whatever dairy products, because the Government is going to do it for you. Once again, the Government is involved, and it is really costing the family farmer in the final analysis.

Even these watershed programs, while they provide benefits to your communities, have unfortunate consequences for others. For example, the Government provides assistance to livestock producers by improving rangeland for the purpose of reducing erosion. Of course, that means some farmers can increase their livestock production at the expense of some other family farmers who receive lower prices as a result of the additional production.

Furthermore, most of the drainage projects, as wonderful as they may seem to those who are able to take advantage of them, the drainage projects increase production at a time when we are buying land out of production. It is just a self-defeating circle that we are involved in.

I would concede outright, that the farm program proposal that we have, with the adjustments that we are talking about, will not solve all the problems in agriculture. It will only help. But at least it is one area where we can start. We can do something on our own. I think most of us appreciate the short-term problem of credit, the longer term problem of addressing the deficit and the longer term problem of writing good, sound farm legislation. All have to be addressed in a balanced way in order to bring about lasting prosperity for the industry that is right now suffering a great deal. Thank you, Mr. Chairman.

Senator COCHRAN. Thank you very much, Mr. Secretary. I appreciate your being here and your presenting the budget and your remarks in support of the budget request to the subcommittee.

COST OF PIK PROGRAM

In the charts that you showed us, I was interested in looking at the projected outlays for the farm bill over the next few years and the results of those pieces of legislation that have been passed by previous

Congresses. Is the $63.3 billion figure that you mentioned as being the cost to Government of the 1981 farm bill, one which includes the cost of the PIK Program that the administration conceived and implemented?

Secretary BLOCK. It includes PIK costs, it includes everything.

Senator COCHRAN. How much of the $63.3 billion is the cost of the PIK program? How much did PIK cost, in other words?

Secretary BLOCK. Somewhere between $9 and $10 billion, Mr. Chairman.

COST OF EXTENDING CURRENT FARM BILL

Senator COCHRAN. OK. I would like to have, for the record, even if you don't have this right now, for the committee, what your estimate would be for the cost of a farm bill, if we were to freeze all support programs at current levels for the next year. If we had a 1-year extension of the current farm bill, what would that cost be for 1 year?

Also what would the cost be over a 4-year period, if we were to extend the current farm bill and support program for a 4-year period, with no increases in loan levels or target prices? Do you have that now, by chance? Do you have any estimates on those figures, what that would be?

Secretary BLOCK. That chart for current services does show that but we can get the specific numbers for you.

[The information follows:]

NET COMMODITY CREDIT CORPORATION OUTLAYS FOR PRICE SUPPORT AND RELATED ACTIVITIES

[Dollars in billions]

	Fiscal year				
	1987	1988	1989	1990	Total
Current services	14.6	15.6	15.4	15.1	60.7
President's budget	8.5	7.7	3.9	3.9	24.0

Senator COCHRAN. What did that show, then? I wasn't sure.

Mr. RUSSELL. It showed about $15 billion a year. So it would be somewhere in the neighborhood of about $60 billion over the next 4 years. Our current services budget assumes an extension of the current program.

Senator COCHRAN. OK.

Mr. RUSSELL. That assumes extension of the 1981 farm bill, as amended.

Secretary BLOCK. The reason why the cost over the next 4 years would be about the same as the cost over the last 4 years is that we still have excess production capacity.

We would have to look for ways to buy that land out of production, if we stayed with the current farm program. You can do it in different ways. You can just spend the money to buy it out, or you could go for a couple of years and use another PIK Program, but effectively, you are buying it out then with grain that the Government has already paid for. So, either way, the cost is about the same.

IMPACT OF BUDGET CUTS ON RURAL AMERICA

Senator COCHRAN. On another subject, you talked about the support programs in rural America. The Rural Development Act was passed the year before I came to Congress. I remember being a candidate for Congress in 1972 and being convinced that one of the things that needed to be done was to ensure the full funding of the Rural Development Act.

Here, 13 years later, we are seeing requests for very sharp reductions in those programs administered by the Farmers Home Administration and the Rural Electrification Administration, which not only benefit farmers, but everyone who lives in the small towns and communities of rural America. Included in those programs which I mentioned in my opening statements, which you touched on, are the rural water and sewer system programs. These have meant so much to a lot of communities which would not have otherwise been able to afford those water systems or waste disposal systems. Now we see the proposal that the grant and loan programs be sharply reduced. The same thing is true for many other programs, including the housing program I mentioned in some detail in my opening remarks.

What I worry about is that we are going to make life in rural America—if these programs are approved, if these funding levels are approved—so unpleasant, so uninhabitable, that we will force people to move into the suburbs and the big cities.

I wonder whether or not that is an appropriate and proper national policy? I think this subcommittee is going to do its share in trying to keep spending under control and trying to reduce the growth in spending. I think that is part of our responsibility this year in the Senate. But I think also that we are going to insist that a minimum standard of quality for life in rural America be maintained.

I don't think those goals are inconsistent, but I think that if we do just approve and rubber stamp these proposals for these sharp cutbacks, that is what we are going to do. We are going to undermine the quality of life so badly in rural America that people are going to leave the area and move into the cities and aggravate the problems we have in the country. What is your reaction to that?

Secretary BLOCK. Mr. Chairman, that is a justifiable consideration. What we are going to be forced to do, if the committee examines all that is involved in trying to come up with a budget that is the right budget, the final analysis is to make those tough decisions as to how do we save the necessary money? What do we do to stop this loan portfolio from growing every year at a rate that is really, I think, an unacceptable rate of growth right now.

You can say, "Well, all these programs are valuable and useful, they help a lot of people." At the same time, you have to decide where you draw the line to try to save some money.

Senator COCHRAN. Have you had your economists there at the Department looking into the impact that these reductions might have on life in rural America? The Post last week—and I don't think that is the last word—but they said you had 400 economists down there at the Department. I wonder if any of them have had an opportunity to analyze the impact of these reductions in funding on lifestyle, life quality in rural America?

Secretary BLOCK. Our Office of Rural Development Policy is supporting some research and development efforts to assist rural areas adjust to changes in their economies. We will provide information to the committee on our efforts in this area.

[The information follows:]

The Office of Rural Development Policy has:

Prepared the administration's 1984 rural development strategy. The Rural Community and The American Farm: A Partnership for Progress. The strategy emphasized the interdependence of farms and communities and the need for creation of new economic opportunities for farmers, many of whom depend on off-farm income;

Supported a research and development program in Oklahoma which is exploring ways of assisting entrepreneurs in the development of new businesses and new products which can be produced in rural areas. This program is designed in such a way that it can be repeated in other rural areas;

Cosponsored a rural high-tech industry incubation conference to assist in marketing the value of rural areas as an environment to start new industries;

Prepared a Rural Resources Guide which includes information on improving local rural economies through private sector initatives and job creation;

Followed closely and provided information on retraining programs authorized by title III of the Job Training Partnership Act for which farmers are eligible. Iowa and Nebraska are particularly active in offering the program to displaced farmers. ORDP is keeping other States abreast of the program and the efforts in Iowa and Nebraska; and

Commissioned a profile of the rural labor force as necessary background for policy development in rural unemployment problems.

Senator COCHRAN. Is there an analysis that is being made or has been made of the possible impact of these changes?

Secretary BLOCK. We are working on that. I think it all depends on how long you stay with these changes. You know if we get our budget straightened out a little bit, we might be able to do a few more things. But right now, I think that getting the budget under control will be of very great benefit to rural places.

The economic improvement from reducing the deficits, we feel, along with changes in the President's budget to increase the rural share of some programs, will offset the effects of the reductions. The President proposes increasing rural housing assistance by HUD by giving rural areas 50 percent of new assisted housing units in 1988. The small cities portion of the Community Development Block Grant Program will be increased from 30 to 40 percent. Substantial new highway funds will be available to rural areas.

THE COST OF INDEBTEDNESS

Senator COCHRAN. I know that reduction in the deficit is going to have a positive impact on the opportunity for farmers to operate profitably. I believe that. I know that right now the debt load in farm communities around the country is so high that as much as 20 percent of the cost of production is interest costs.

Secretary Block. Right.

Senator Cochran. An average business can operate profitably with an 8- or 10-percent margin. Agriculture is requiring over 20 percent return on investment just to break even. How do farmers expect to make it, given that existing burden of debt? Is this budget going to be able to bring them out of that situation?

Secretary Block. The fact that 20 percent of their obligations is interest payments is brutal to the American farmer. I think we all know that. If we can bring the deficit down, most of us think that it will bring the interest rates down some more.

That is a key point. Interest costs are where the money is going. Some farmers, of course, don't owe as much money as others. It depends on how much you owe as to how important this is. It has become very important to agriculture as an industry.

Senator Cochran. I know that Senator Andrews commented about the loan program that has been put into effect by the administration and the changes in that that were made by the Senate. I worry about whether we are doing the right thing in encouraging the acquisition of more debt by the agriculture sector given this 20-percent cost that hangs over the head of the average farmer right now, just in paying interest on existing debt.

I know one farmer told me in some hearings I had in my State a couple of months ago, when we were talking about farm credit—the Farmers Home program in particular—he said, "I don't need another loan." He said, "I need a grant."

Well, you know, that is an illustration of how tough it is in some areas of the country. A loan isn't going to help some farmers. I don't know whether, under the budget that you are recommending, that we get at that problem or not. We do need to find some way to put profitability back into farming. I think one of the keys is an aggressive support program.

U.S. SHARE OF WORLD MARKETS

Is there a strategy right now, that is reflected in this budget, for improving our competitiveness in overseas markets so we can take advantage of the growth in the world markets and get a bigger share of that market for America's farmers?

You had a chart the other day when you presented the administration's farm bill that showed our share of the wheat market decreasing over the past few years, whereas the world market was growing. The U.S. farmer was getting a smaller share of that market. That seems to be a tragedy in my opinion. If we are the competitive farm economy that we talk about being, that the American farmer can outproduce and produce more competitively and can compete against anybody in the world, then why is it that our share of the market has been declining rather than increasing?

Secretary Block. It has been declining for a couple of reasons. One reason is we have had a rigid-type price support, and that has priced some commodities out of the market because other countries can produce those commodities and undersell us.

Another reason that we have been losing markets is because the dollar has been so strong that other countries' products are cheaper in the eyes of those who are going to buy the product. It has been a very difficult problem for us.

Let's look at Canada, a good trading partner of ours. Their dollar is much weaker than ours, 70 some percent of what our dollar is worth. So we find a lot of their products flowing into the United States that would not ordinarily flow in here at this volume.

Once again, I don't know if it is true, but a lot of people suggest that if we get the deficit under control and interest rates come down accordingly, we are going to see an improved dollar relationship with other countries.

We really do need, Mr. Chairman, as you suggest, to look to the export market because as an example, in 3 years, the possible population in the United States will grow some, but not that much, in terms of new markets for agricultural products. But in 3 years, there will be enough new people in the world to represent a whole new United States.

The growth is in the rest of the world, not in the continental United States. So we have to look to the export market. We have to find a way to compete. That means price supports that are at a level that will make us competitive and in some way change this dollar relationship.

Senator COCHRAN. Senator Abdnor.

USDA ECONOMISTS

Senator ABDNOR. Thank you, Mr. Chairman. If I could follow up on a question by our chairman. I was reading in the paper that USDA has 400 economists in the department.

Secretary BLOCK. I don't know how many there are exactly.

Senator ABDNOR. I thought maybe you didn't have enough. The paper also said that the economists were not following up on what the economic impact would be for the type of program you are proposing. Is that true?

Secretary BLOCK. No; that is not true. Mr. Russell commented on that a while ago.

Mr. RUSSELL. Senator Abdnor, as I stated earlier, the Department has a credit finance section within the Economic Research Service. We have about 10 or 12 economists who are assigned full time to that group.

In response to a question that Senator Andrews brought up, I would say that the economists who are in that section are some of the finest in the country. It is inaccurate to say that they have not been following this credit situation very closely.

We issue, on a regular basis, an agricultural finance outlook report, for which this group is responsible. They provided a lot of the basic national data on the farm financial situation. So I would say that they are following the situation closely.

Senator ABDNOR. That doesn't surprise me. I read a lot of things that aren't quite the way they are. What will be the effect of your program?

How many farms would go under in another year if we put the proposed program into effect?

Although in theory the free market is a great thing, if you lower market prices much lower than they are today, even those who have had better breaks will be in trouble.

Do you have any projections on what the income for a farm might be under your bill as compared to what it is today?

Secretary BLOCK. I don't have any numbers on that right now. We are doing an analysis on the the farm bill and we will have that later when we make a presentation on Thursday. We will make all of our projections available to the committee.

Senator ABDNOR. I wish you would. I can't imagine what would happen to a bushel of wheat under your program. We can't radically drop the price supports and target prices. Take a fellow out in my part of the country farming 500 or 600 acres of wheat. You'll kill him by dropping his price 30 percent, especially if he is a borderline case now.

How many are we going to put out of business? This bothers me. Free markets may be fine once you get over the hump and prices improve. But while we're going to the free market, I believe that a lot of farmers are going to have a hard time retaining their farm with those kinds of prices, especially if they are having difficulty now through no fault of their own.

You don't see my fears coming true, Mr. Secretary?

Secretary BLOCK. All the problems we have in agriculture happened to us under the current farm program. As far as I am concerned, if we make some changes and move in a gradual way toward more of a market-oriented program that is price competitive in international trade, we can sell a greater volume of product. We will still have in this transition period a target price support and direct payment to the farmers, which will help sustain them while we make the transition.

Senator ABDNOR. Our one hope, you said a minute ago, is the export market. Export obstacles are still in the way. I don't see anything happening with trade barriers.

Are they shutting us out? I don't see USDA doing anything about the subsidies offered by the European Economic Community of our over-valued dollar.

Chairman Helms is proposing to spend a considerable amount in an export program. Don't you think this is absolutely necessary?

We need more programs like the one Ambassador Brock developed for the Egyptian flour sale.

Secretary BLOCK. Sure.

Senator ABDNOR. I am glad we got that sale. I could care less if we made France unhappy. They have been stealing our markets for a long time. We finally got our market back but we had to use some CCC stocks.

Where is a better place to use surplus stocks than regaining world markets? It is better than a PIK Program if we can make sales. Can we do more of this or do you think we have to worry about the Europeans again?

Secretary BLOCK. I think that we may well find it necessary to challenge the Europeans in ways much like that or other kinds of ways. One section in the farm bill that we have presented requires the Federal Government to take aggressive action against countries that victimize the American farmer. That is one way to do it. We certainly have the surpluses that we could use to do it.

Senator ABDNOR. I certainly would hope so. Instead of dollars, use grain to undersell them, even if you have to give it away.

LIMITATION ON LOANS TO FARMERS

Earlier you were talking about funding levels for the Farmers Home Administration. Did you ever give some thought to proposing some changes in FmHA and cutting back on who is eligible for loans?

Secretary BLOCK. We have made some changes. We are trying to move more of the loans to loan guarantees instead of direct loans.

Senator ABDNOR. I don't mean using more guarantees. I know people who have up to $3 million in FmHA loans. That is a lot of hoowee. It's about time we bring FmHA back to what it is supposed to be. There must be some limitations put in place and frankly, the fellows in my office and I have been researching the history of FmHA from the day of its inception.

We are getting ready to introduce legislation to correct abuses in FmHA. I don't see any sense in loaning hundreds of thousands of dollars to anyone. I thought FmHA was intended to keep someone in business in a tough year. Now it is a permanent program to help some farmers get larger.

Secretary BLOCK. In the operating loan program, Senator, I think there is a limitation on that. I think it is $200,000.

Senator ABDNOR. What about that big jump you were showing in your charts? Where are most of those loans going?

Mr. DEWHURST. A great deal of that, Senator, traces back to 1979 and 1980, when the Department ran very large emergency loan programs. Those programs didn't have the constraints that the regular operating loan programs have.

A large share of the current delinquency problems can be traced back to those loan programs. Farmers took those loans at the time and have fallen behind in payments and are having a hard time getting credit now from other sources.

Senator ABDNOR. How long ago has it been since you curtailed somebody in considering their application who came in and said, "I want to buy my neighbor out down the road. He has eight quarters. Can you lend me money for that purpose?" Are we still doing that?

Secretary BLOCK. We will reduce the amount of farm ownership loan money. It is about $700 million this year, and we don't have any in the fiscal year 1986 budget. We have cut back.

Next year we won't have any business and industrial loans, which are good, but there has been big money going out for that kind of stuff. We don't make the economic emergency loans now. Those are the ones that really put out the big money to an individual, maybe $1 million.

Senator ABDNOR. That is what bothers me. This is my last question, Mr. Chairman. I know my time is up.

SIZE OF BUDGET FOR AGRICULTURE

When we talk about the deficit and when we talk about the cuts, it should be remembered that agricultural programs make up less than 2 percent of the budget, right?

Secretary BLOCK. That's correct.

Senator ABDNOR. I have a hard time explaining to South Dakotans why we are going to put 12 percent of the total cuts on that area of the budget which is only responsible for 2 percent of all spending.

Additionally, there are a lot of programs in the agricultural budget that farmers are getting blamed for that don't help farmers. I wish the American people could realize that when they read about the size of the budget for agriculture, that only a small percent goes to the farmer.

[Senator Abdnor's prepared statement and the Secretary's written response follow:]

STATEMENT OF SENATOR ABDNOR

USDA IS FLYING BLIND ON FARM POLICY

Good morning and welcome, Mr. Secretary. Before I make a few opening remarks, I'd just like to thank you again for taking the time and trouble to meet with my State legislators last week. You did a great job with them, and I'd just like to note for the record—because I didn't read it in the press anywhere—that they gave you a standing ovation when you were finished. To me that's news. The Secretary of Agriculture, perhaps second only to the Director of OMB, has almost always been an unpopular guy. And I don't envy your position, especially in these difficult budgetary times.

Nevertheless, Mr. Secretary, I do have some concerns I'd like to raise. This morning I'm not going to blast you for wanting to eliminate the honey loan program, even though South Dakota is one of the leading honey-producing States in the Nation. I'm not going to chastise you for suggesting that 50 years of rural electrification is enough. Nor am I going to remind you that the wool program is supported by Import Fees, and thus does not cost the Government money. I won't lecture you about the need to protect our most precious natural resource—our soil—and tell you that an 80-percent cut in the Soil Conservation Service is unacceptable.

I won't bring up these issues and more today, but I do want you to know that these issues are of great concern to me. They won't go away, and I do have an obligation to see that they are fully and fairly addressed.

Instead, today I want to discuss with you the bigger picture in agriculture—the long-term effects of our agricultural policies. This weekend in the Washington Post an article indicated USDA does not have anyone studying the overall economics of agriculture in America, and that not a single person in USDA has a firm grasp of how the policies you are advocating will change the face of U.S. agriculture.

Now, I don't believe everything I read in the Post, but the Post was right on the mark on this issue. I have not seen a single, well-documented study on the effects of the administration's farm bill on agriculture as an industry, much less on individual average-size family farms.

You say that your proposal to lower target price and loan levels will be good for U.S. agriculture, but what documentation do you have to support that?

I'm not from the "Show-Me" State of Missouri but please show me how a 400 acre wheat farmer from Winner, SD, will benefit from lowering the target price for wheat? Tell me how low prices will fall before the "free market" will bring supplies down and the price up to a break-even or profitable level. Will it take 2 years for this to occur, 5 years, or 10 years? If it takes 2, 5, or 10 years, will the average 400 acre wheat farmer from Winner still be in business to reap the rewards? Can you show me facts, figures, and dependable studies?

Or how about the dairyman from Watertown, SD, who milks 60 Holstein cows? How cheap will milk get? Will he be able to pay his bills? How will the local milk plants and cheese plants be affected? Will this small dairyman survive, or will corporate dairy farms be the norm 10 years from now under your plan? Many people charge that your Agricultural Adjustment Act will deal the deathblow to small farmers across the country. Do you have data to refute these charges?

Mr. Secretary, it appears that USDA is flying blind. Rhetoric isn't good enough for the family farmers, ranchers, agribusinessmen, and smalltown main streets I represent. We need facts. We need to know the long-range effects of decisions we make today. How can Congress make an informed choice if even USDA doesn't know what the outcome will be?

Mr. Secretary, I like you and think you are a great guy But please don't ask me to trust you and David Stockman on blind faith, without supporting evidence. I can't do that and neither can South Dakotans. I'm reminded of the three greatest lies, and I think you've heard them before:

The first is, "The check is in the mail."

The second is, "I love you."

And the third is, "Trust me; I'm from the Government and I'm here to help."

Well, Mr. Secretary, I don't doubt for a minute that you're here to try to help agriculture and our family farm system, but good intentions aren't enough. We need facts. I've been trying for a year to get the facts from the Treasury Department on the impact of the tax code on agriculture, and they still haven't been able to tell me. I'm afraid the situation is little better at USDA in terms of our general farm policies either, and it seems to me that it should be a very high priority to develop the kind of data we need to make informed judgments about the future of agriculture.

RESPONSE BY SECRETARY BLOCK

I understand and share your concern about the well-being of American farmers. However, I am very convinced that we really only have three alternatives that are available to help address the real concerns that are before us: (1) an extension of the current farm legislation; (2) the establishment of mandatory controls; or (3) the implementation of a flexible market-oriented approach, such as the Agricultural Adjustment Act of 1985. I sincerely believe that the AAA will best meet the needs of today's agriculture.

During the listening sessions that we held around the country last year, the major point on which most people agreed was that the current farm programs are not working. If they were continued, pressure from ineffective acreage programs, rapidly building inventories, high levels of budget outlays, and loss of world markets would force changes after only a few years. In fact, the current farm programs would likely give way to mandatory controls.

So the question really is whether the agriculture industry or the average farmer would be better off with mandatory controls or a program like the AAA. We estimate that to hold budget outlays to the level forecast with the AAA wheat acreage would have to be reduced from 80 million acres to 50 million acres. Similar reductions in other commodities would be required. Although prices would be somewhat higher with mandatory programs than with the AAA, they would not offset the impact of lower volume, and gross revenues for an individual farmer; and, for the agricultural industry on a whole they would be even lower. Furthermore, producer costs per unit under mandatory controls would be higher because capital equipment would be used less efficiently, and land prices and rents would rise to reflect the value of the production "rights" associated with the land.

By implementing mandatory controls, we would not only reduce the size of the agricultural sector, but we would also reduce general economic activity—by an estimated $5 to $10 billion and 200,000 to 250,000 jobs annually as compared to the AAA. This would include significant reductions in economic activity and employment in the input industries, as well as processing and transportation. This administration believes that the Agricultural Adjustment Act of 1985 sets agriculture on a course which will ensure a longer term prosperity not only for agriculture but for the entire U.S. economy.

Senator Cochran. Senator Burdick.

Senator Burdick. Thank you, Mr. Chairman.

Mr. Secretary, there is some good news in the farm area, we have 2 or 3 feet of good snow out there in the northern plains. I hope we can get the crop in. That is all.

I have two different areas I want to explore for a minute. I know you have a strong personal commitment to adequate conservation of our soil and water resources. Wind erosion damaged more land of the Great Plains in the last 2 months of 1984 than during any comparable period since the mid-forties, according to the Soil Conservation Service.

Peter Myers, Administrator of the Soil Conservation Service, has said we are off to a bad start this season in my part of the country, that last year was the third worst wind erosion year in the 50 years we have been keeping records.

The administration budget proposes dramatic reductions in this part of the Conservation Service for the next year and beyond. In the Great Plains, farm income is often as important as anything else in getting a good conservation effort because you have to make some investments in plant cover and wind strips and other approaches to holding the soil.

My question is: What economic incentives are existing where private institutions might come more significantly into play in the absence of Federal assistance in the Great Plains?

Secretary Block. What you are really asking, if I understand it, is if we don't have very much money from the Federal Government, what can we see come in from the private sector to get people to do things that will conserve our soil?

Senator Burdick. Right.

Secretary Block. I am one who believes that there is, right now, a silent revolution going on in soil conservation in many parts of the country. The farm equipment industry has been developing a new tillage system and new machinery that is helping a great deal with conservation tillage-type practices.

In fact, today, a full one-third of our land is using minimum tillage—minimum-type tillage as opposed to the traditional lowboy plow that we saw about 10 years ago. So there is a very rapid movement toward conservation tillage in the farm equipment industry as part of that movement.

It is also being promoted by the farm magazines. Ten years ago people didn't pay much attention to an article on soil conservation in a farm magazine. I was talking to some publishers about this. They said today articles that discuss, review, and recommend policies of soil conservation in the farm magazines have as much readability as those articles on production of crops or livestock.

So I think that the farmers have finally decided that it is important to conserve the soil. We are seeing an individual commitment where the farmers work with the farm equipment industry in providing new machinery and equipment. We are seeing a lot of progress.

A lot of States are starting to put money into their soil conservation program. A great many of the Midwestern States are doing this. So I think there is a growing awareness of the importance of conserving our soils, and they are helping to provide the necessary funds.

Senator BURDICK. Really, is there any substitute for the Federal cash programs to assist in this effort?

Secretary BLOCK. Well, certainly, you know you can always say more money was spent on cost sharing. I participated in cost sharing myself in years past on our farm. I put in a structure and so forth that would hold back water that could wash out a ditch.

I think you are going to see that, if the Federal Government doesn't spend as much, there will be farmers doing some of it on their own. They will be using different tillage techniques to correct needed conservation problems.

We will continue to provide the technical assistance and soil mapping to farmers so they will be able to get the job done. We just have to decide how much we are willing to spend. What is the right amount?

Senator BURDICK. I assume next year, we will be asked to pass a revenue neutral reform bill, if not this year. However, this year we have been asked to increase revenues for the budget. It seems there are user fees proposed for most things. These things seem to hit rural areas hard, in land/water user fees, for example. The proposal is to double hydropower water rates in my area even though there is 100 percent cost recovery on hydropower.

My question, Mr. Secretary, is: Is the Department of Agriculture called upon to make the economic analysis or comment on these other kinds of proposals from other departments that are going to impact heavily on the cost of living and doing business in rural America? I understand primarily this is a question for another committee but, we are in the peripheral area, at least.

Can you comment on that?

Secretary BLOCK. Senator, I don't have any answer to that right now but if there are any reviews or studies that we have, I will get them prepared and see that they are made available for the committee.

Senator BURDICK. Thank you, very much.

Mr. Chairman, I have a statement here from our colleague, Senator DeConcini. He would like his questions for the Secretary be made part of the record.

Senator COCHRAN. Without objection, they will be made part of the record. We ask that you respond to them as soon as possible.

[CLERK'S NOTE: A letter and question from Senator DeConcini appear in the questions and answers section of today's hearing.]

Senator BURDICK. Thank you, very much.

Senator COCHRAN. Senator Mattingly.

MASS MEDIA ATTENTION ON AGRICULTURE

Senator MATTINGLY. Mr. Secretary, I am deeply concerned about the events that have occurred over the past few weeks, to be honest with you. We have seen a vast mobilization of the mass media's attention. I would doubt the credibility of some of the reports, but I think that in listening to the statements that came out of the Congress from some of our colleagues, I think that if anybody is out there watching on TV, they would be led to believe—the average American would—that Members of Congress and members of the administration and yourself were like a vulture waiting to prey upon the American farmer.

I think that is an unsound and wrong impression that has been given out of the Congress. I really haven't seen an accurate report regarding the bipartisan efforts that were really set up in those few weeks, both Democrats and Republicans and yourself and everybody else, in trying to negotiate and trying to arrive at an agreement on an assistance-type program, that you did come up with.

You know, I am sure, this probably won't go any farther than you and I right here. It is unfortunate. But I just want to say that I congratulate you and the Democrats and the Republicans that did get together and try to resolve that problem.

FOREIGN TRADE POLICY

In the same vein though, I would like to say that once again, I see, we have really given a temporary, Band-Aid–type approach to a really gaping wound that we have in the agriculture area in our country. And I won't say that I have the answer to all those problems. I think that we can all say that we have had unsound Government policies. We have had unsound foreign policy.

What I think you are trying to get across, and what I think all of us are trying to get across, is that we do need to change the policy. The policies don't work. It hasn't just happened in the last 4 years. It has happened really over decades. We do need some type of a stable policy.

Your budget, that you have, calls for a cut in the commodities support program of something like $15 billion. Last week, as I said, we passed legislation to increase commodity credit by something like $1.5 billion.

It seems to me that the crisis that is being faced by agriculture in this country is not simply one of more or less tax dollars. It is a fundamental crisis of policy that we have in this country. The policy that you are proposing, I don't know if it has been expanded upon other than our little meetings that we have had. But if it is one of free markets—which I don't think there are any free markets—if there is one, how do we get there from here, and still have an agricultural sector to compete?

Secretary BLOCK. I think if you look at our competitors around the world, you will find that most of them along with us have some subsidies involved in our agricultural industries. But some of them are pretty fair competitors. I don't think that they necessarily are victimizing the American farmer. I am talking about countries such as Canada and Argentina. They have an export tax on their grain. Their farmers are really victimized by their own government.

Australia, New Zealand, and Brazil have been subsidizing their poultry production very heavily and hurting us in the Middle East.

U.S.-EUROPEAN COMMUNITY RELATIONS

I think the countries that are giving us the biggest problems on exports and really are not playing by rules that are fair are in the European Economic Community. There is no question about that. In a very, very big way, their policy is to provide high supports, subsidize exports in order to get rid of those crops that they produce. That is at the expense of the American farmer and everyone else that might want to compete in the world market.

The trade section in our Agricultural Adjustment Act of 1985 provides that by July 1986, if we have not seen substantial changes in these practices that are victimizing our farmers, we are obligated to take to Congress recommendations of what we are going to do to the Community. We are going to have to do something.

Senator MATTINGLY. What year?

Secretary BLOCK. July 1986.

Senator MATTINGLY. OK. You know, of course, to me, that is too late. I was speaking to a trade group last night. The European Community just loves our trade policy. They love it. I think Japan loves our trade policy. Everybody else likes our trade policy because we haven't got one. You know we are the sitting ducks in the world right now. You and I have talked about this many times and you agree with me.

I sort of wish I could move you down to the White House so you could advise whoever it is that makes the decisions on the trade policy that something different needs to be done. I feel, like you, there isn't any really free market out there. We have to change the way we are doing business.

U.S. AGRICULTURE POLICY

We don't have an agriculture policy in this country, unless it takes into consideration how we are going to dispose of the surpluses that we grow. Now that is just basic. You know you can come up with as many farm bills as you want to come up with, but until we figure out a change in the trade policy of the United States, there is no way to compete. It is easy for the Congress to talk about the overvalued dollar, but that is not the main problem. The main problem is that we cannot compete with unfair barriers and subsidies put up by other people. I don't know who has the beef or who has the clout, but we have got to change what we are doing.

Budget policy is one thing. We can talk about dollars and moving dollars back and forth in this farm bill or anything else we want to, but until we get a policy on trade, Mr. Secretary, I don't know how there is a way that agriculture can compete out there. Do you?

Secretary BLOCK. Part of the objective in the new Agricultural Adjustment Act is to have our supports at a level that will be competitive in international trade and also obligate this Government to do something to those countries that are using unfair trade practices.

So it is really speaking to those two questions and I know those are foremost on your mind.

Senator MATTINGLY. I guess sometime everybody feels like, "Here you are a United States Senator, or Secretary of Agriculture, and we are not getting anywhere." So what are we going to do? You know the best salesman we have in the United States is the President. Maybe it is time to turn the President loose on the leaders of the other governments and try to sell them on the idea that it is time for them to change the way that they are doing business, that they need to look in the mirror and look at their trade laws. I am certain that they wouldn't want the United States to have the same trade laws that they have.

Maybe, Mr. Secretary, we ought to write something into the farm bill that tells the President that we want him to be our salesman for agriculture. What do you think?

Secretary BLOCK. Well, I don't know just what we will have in the farm bill in the final analysis, but I assure you that the President is an aggressive salesman for American agriculture. In meetings with heads of states--Prime Minister Nakasone, for example—the President has made it very clear, and I have been with him when he has, about opening up the market to citrus and beef. We had something done there.

There is a lot more yet to be done, but the President, I assure you, is prepared to take a hard line against these countries.

COST OF VARIOUS COMMODITY PROGRAMS

Senator MATTINGLY. Just off on another line real quickly. How much does the wheat program cost the Treasury?

Secretary BLOCK. The wheat program?

Senator MATTINGLY. Yes.

Secretary BLOCK. We have these books with numbers in them. We will find something here.

It is $3.8 billion this year.

Senator MATTINGLY. 1984?

Secretary BLOCK. 1985.

Senator MATTINGLY. How much does the dairy program cost?

Secretary BLOCK. $1.6 billion in 1985.

Senator MATTINGLY. $1.6 billion in 1985, and the wheat was $2 billion?

Mr. DEWHURST. The wheat program cost $3.8 billion in 1985.

Senator MATTINGLY. How much did peanuts cost?

Secretary BLOCK. $14 million.

Senator MATTINGLY. That sounds like it is less than a breadbox. Thank you, Mr. Secretary.

Secretary BLOCK. Thank you Senator.

[The statement of Senator Mattingly follows:]

Statement of Senator Mattingly

FARM CREDIT CRISIS

Mr. Chairman, I welcome this opportunity to have before our subcommittee the distinguished Secretary of Agriculture, Jack Block, and look forward to hearing his testimony and his answers to many questions I know will be propounded to him today.

I am deeply concerned about the events which have occurred over the course of the past few weeks, Mr. Chairman . . . events both here in the halls of Congress and in the agricultural sectors of our economy. We have seen a vast mobilization of national media attention and lobbying pressures focused on "The Farm Credit Crisis" which seems to have completely swept away any ideas that any of us may have had about facing up to the tough problem of reducing our Government's $200 billion deficit.

In watching the news conference of debates here in the Congress and in listening to the statements of some of our colleagues, the average American would be led to believe that every farmer in the country was going "bust" immediately, if not sooner, and that some members of the administration were circling gleefully—like vultures—to feed on the corpse of American agriculture. I have not yet seen an accurate report regarding the bipartisan efforts in the Senate in negotiating with Secretary Block and with the President to arrive at agreement on an expanded assistance package for hard-pressed farm operators. And yet, we did negotiate and we did agree on a package of expanded aid on the afternoon of Saturday, February 23.

The agreement was commemorated with the passage of a "Sense of the Senate" resolution embodying the terms and conditions of the agreement on the same afternoon, but then we were back the very next week debating farm credit amendments to a bill providing food assistance to starving millions in Africa . . . and during that debate precious little was said about starving people, but much was said about how many tens of millions of dollars would provide the proper inducement to commercial lenders in order for them to extend credit assistance to their farm borrowers. Even while that debate was going on last week, Secretary Block announced that the administration would go forward expeditiously with the agreements negotiated during the previous week, and I understand that actions necessary are being carried out as rapidly as possible to see that U.S. farmers will have operating loans to plant the 1985 crops and that there is a reasonable program available to encourage participation by commercial lenders in a debt restructuring program.

But Mr. Chairman, these are only temporary "Band-Aids" which we are trying to apply to a gaping wound. It's like trying to put out a forest fire with a water pistol. No matter what measures this Congress approves, there are some persons involved in farming who simply will not survive financially over the long haul. What concerns me as much as the immediate problem of farm credit is the long-term problem of farm policy. In my opinion, unwise Government policy over the past decade has led us inadvertantly to much of today's farm credit crunch.

Programs which have sent the wrong signals to the farmer have led him to make the wrong financial and investment choices. Foreign policy decisions which have embargoed American agricultural products have also led to short-term loss of sales and farm profits and to longer term losses of world markets, and set the stage for an unsettled farm economy.

Mr. Chairman, and Mr. Secretary, in my opinion we must stress the development of a long-term, stable farm policy which recognizes the realities of producing for a world market if we are to arrive at any real solution for our current farm problems. We must adopt a farm policy which is built around a sound trade policy, and yet I cannot see that the administration's proposed farm legislation addresses the trade issue in any really meaningful way.

I would say, Mr. Secretary, that I agree with the basic concept of restructuring American farm policy around a more market-oriented concept. However, I would also maintain that we would be wrong to make a dramatic shift in domestic farm policy before we have allowed the agricultural sector of our economy to more fully recover from some of the damage which has previously been inflicted through Government actions. I pledge to work with you and with my colleagues in the Senate in first adopting a sound policy regarding international trade, and then in tailoring our farm programs around that framework.

COST OF TOBACCO PROGRAM

Senator COCHRAN. Senator Bumpers.

Senator BUMPERS. Mr. Secretary, since the chairman has brought that question up, you say that the tobacco program cost $500 million, and most of my colleagues from tobacco growing States tell me that the program costs nothing. Who is right?

Secretary BLOCK. The cost of the program is primarily the administrative cost of operating it.

Senator BUMPERS. Do you have anything else, other than that? That is just the program, the allotments and so on?

Mr. DEWHURST. The number used is an outlay number for a given fiscal year. Whether that outlay turns out to be a permanent cost to the taxpayer depends on whether we have to write that off as a loss, eventually.

The tobacco program, over its history, has not cost taxpayers very much because even though there have been some outlays in the short term, they have, for the most part, been recovered over the life of the program.

Senator BUMPERS. Why is every commodity scheduled for extermination under your bill except tobacco?

Secretary BLOCK. Tobacco will be presented. The administration will have a plan to address the tobacco program.

Senator BUMPERS. Why was it not put in the bill in the first place?

Secretary BLOCK. There are two reasons. The first reason is, it is permanent law. It did not expire this year, like the other programs we are talking about. The other programs expire this year, so they fit right in.

They all have to be addressed. We really don't have to address tobacco this year but the administration does intend to.

The second reason is, I wanted Senator Helms to present my bill. That is a good reason too.

Senator BUMPERS. Mr. Secretary, I want to tell you, that is the most candid remark that I have heard from an administration official in months and months. I mean, we all knew it. I just wanted to hear you say it. I really appreciate that.

AGRICULTURE AS A PERCENTAGE OF TOTAL USDA BUDGET

Now, Mr. Secretary, there are two or three things that I am really gravely concerned about. One is just a matter of semantics and perception. In your statement you point out that the USDA's budget is $45.1 billion. In the scheme of things that only represents 4.7 percent of the Federal budget. But that includes nutrition programs, that includes food stamps and a whole host of things that are not related to the crisis in agriculture in this country.

Now both you and the President have been saying a lot of things recently about how we must move toward a free market and about how the price of these supports have gone up and admittedly, price supports have gone up, as you correctly point out.

I personally think it is unfair to the farmers, who really only get about 1.5 percent of the total Federal budget, to tell the American people that it is 4.7 percent. I mean, the farmers, you know, while they benefit from the School Lunch Program and they benefit from food stamps, those programs were implemented and adopted by Congress for entirely different social reasons.

Don't you think it is a little unfair, because the big cuts, the big cuts in the agricultural budget are in farm supports and farm programs? Is that not a fair statement?

Secretary BLOCK. Yes, sir, that is true.

DECLINE IN FARM OWNERSHIP

Senator BUMPERS. Second, it is widely rumored that the USDA has a study—you can either confirm or deny—that shows, under this program, 27 percent of the farmers of this country will be off the land—I am talking about farmers in the context of those who get most of their income from farming—27 percent of them will be off the land by the end of 1986. Is there such a study?

Secretary BLOCK. I can't imagine that there is such a study. I have never heard about it.

Senator BUMPERS. You have never heard of one in the Department or out of the Department?

Secretary BLOCK. I have never heard anything like that. I don't know what it is.

Senator BUMPERS. Do you have any kind of a study indicating how many farmers will not be farming in 1987, if your program is adopted?

Secretary BLOCK. Our estimate has been that we will probably lose about 5 percent of our farmers. However, we are going to lose that many almost regardless of what we do in terms of farm programs. But the farm programs, I don't think, are running us off the land.

Senator BUMPERS. How many farmers did we lose in 1984?

Secretary BLOCK. About 3 percent, a little over 3 percent, maybe.

Senator BUMPERS. How many in numbers, raw numbers, is that? It's about 1,000 a week, isn't it? What do you anticipate in 1985?

Secretary BLOCK. About 5 percent in 1985.

Senator BUMPERS. How many in 1986?

Secretary BLOCK. I don't have a number. I would say it would probably be about the same. That is the best guess I could have here this morning.

Senator BUMPERS. What do you think this 5-percent-per-year loss of farmers is going to do to the structure of rural America? How do you perceive that? Is there any economic or social cost to this country?

Secretary BLOCK. In terms of rural communities and in terms of the social cost, I think there is always some social cost when you see change.

I don't know if it is necessarily an economic cost in the final analysis because I think we probably still will be producing the food. We have seen, for 50 years, a decline in the numbers of farmers, in a range of 3 percent or whatever per year.

I don't think any of us know the exact number. In terms of social cost, there is always social cost when you have change. In a dynamic society you are going to have change.

PROPOSED REDUCTION IN FUNDS FOR WATER AND WASTE TREATMENT FACILITIES

Senator BUMPERS. You have scheduled a very dramatic reduction in the funds for the Farmers Home Administration dealing with water and waste treatment facilities. I forget the exact figure, something like $500 million to maybe $50 million.

Let me ask you this, because Senator Stennis and I have introduced a bill. I know of at least one situation in Arkansas that my bill was specifically introduced to redress, and Senator Stennis has a similar problem, and that is where the rural area's underground water supply is hopelessly polluted. It will cost this small Arkansas town close to $1 million to develop or to build a line from the nearest community to resolve their problem.

Right now, they are hauling water in trucks and using it very sparingly. They are above the Farmers Home Administration income level and therefore do not qualify for any FmHA aid, and our bill would simply give the Secretary discretion to waive the income requirement in cases where the health of the community has been certified by the State health department to be in danger with existing water someplace.

Now, you tell me what I am supposed to tell the people in Green Forest, AR, about their Government when it is absolutely impossible for them to even think about paying water rates sufficient to build this line on their own? Are they supposed to carry water in there for the rest of their lives?

They didn't pollute the ground water supply. They are at the mercy of someone who cares enough to help them. Senator Stennis has an almost identical situation. You are proposing to cut that program about 90 percent. What would you recommend that I tell these people who would have absolutely no chance of getting assistance from FmHA if it is cut 90 percent?

Secretary BLOCK. I think that not just those people but all the people of this country have to make the judgment collectively. One community isn't going to make it alone.

The Congress will make that decision through the governmental process of determining how much we are willing to spend on things like this. We can go in and pay for the waterline. We could pay for it with a loan. We could pay for it with a grant. We can do it in every community in the country.

I know there are just an unlimited number of good and useful things that the Federal Government could spend money on, but we don't have any money. We have a $200 billion deficit, and we are trying now to figure how to cut the spending.

Now it is true, also, that the Department of Agriculture doesn't spend all the money. Our budget is relatively small compared to a lot of them.

But we are part of it. I was able to show earlier how the loan portfolio of USDA has grown to more than $140 billion. It keeps growing each year.

I don't know. Maybe we will end up building those waterlines in the end. I think it just depends on what everyone decides, whether we are going to spend the money or not.

Senator BUMPERS. It seems to me that it would be better, if you are going to eliminate most of the program anyway, it would be better to maintain something along the line that we are talking about. Other people whose underground water supplies are not polluted can at least continue to drill wells and cope. These people cannot cope. That is where Government is supposed to play a role. I don't want to belabor that. I hope FmHA can still help them.

BRUCELLOSIS PROGRAM

Let me go on to one other thing. That is the field of brucellosis. Now I have both a parochial and a wider interest in the brucellosis program. I had to sell my cattle to raise the money to run for Governor. I was running against Governor Rockefeller. He didn't have to sell his cattle. [Laughter.] But I almost was not able to hold my disbursal sale, because I had one suspect in my herd.

But now the brucellosis funding is recommended for a very dramatic reduction at a time when my State is threatened with a quarantine. We are doing everything that we possibly can. We get about $3.5 million in Arkansas. It is not very much. But the legislature just passed a very stringent bill. We are doing all we can.

I am talking to your people daily and they say as long as we are making that kind of progress, they are not going to tell you absolutely that you are going to be quarantined. But they are impressed with the fact that we are biting the bullet and doing everything we can. There are some other States similarly situated. But again, there are limits to what we can do.

I think there is a national interest in eradicating brucellosis. If I were Secretary of Agriculture, I would go to the President and say, "Mr. President, we need to eradicate brucellosis in this country, and we can. If we go at it on a mass basis, we can do it."

My wife got all the children in this country immunized in 2 years after I came to the Senate. Now that we have let our guard down, we have had three deaths in one school from measles, just because we let our guard down. We could do the same thing with brucellosis.

What is going to happen to the brucellosis program? Are we going to say to the States they can handle this, or to the farmers, "You can handle this?" You know, one farmer can't do it. One farmer can't do it. It takes all of them.

Secretary BLOCK. Well, it is true that there has to be a coordinated effort. We have spent 50 years trying to eradicate brucellosis. We have a number of States that have this job done, some do not. We are getting down to where we have accomplished that, and with the budget pressures that we have, we are relying more on vaccination, if we can get more States to participate, where the problems are the most severe.

The Federal Government shouldn't have to carry the full freight here on the final stretch in the eradication of brucellosis.

COLLATERAL FOR FMHA LOANS

Senator BUMPERS. Mr. Chairman, finally, let me just ask this question: I have introduced a bill, the substance of which would say to the Farmers Home Administration, No. 1, you will not take more collateral as security than you actually need to secure the loan.

Now, we have a lot of fine Farmers Home offices in our State. I have often wondered how you expect to recruit people to disburse hundreds of millions of dollars. We do a pretty good job of it. But it is a very difficult thing, as you well know.

But my point is this: No. 1, they will not take more collateral than they need under my bill. No. 2, if they wind up having to foreclose on the home as a part of the collateral, they will make every effort to let that farmer renegotiate his loan some way or another to take his home out of the foreclosure. No. 3, it would require the Farmers Home Administration to keep that land in inventory for 5 years and give that farmer a chance, at anytime during that period, to redeem the land that has been foreclosed upon.

Now, that is essentially a moral proposition with me. But it also serves one other purpose. It also takes that land out of production, and God knows if there is anything really wrong in this country, it is that we are producing too much. I have voted for the most stringent sodbuster bill that I could vote for, whether it was Melcher's or Armstrong's. I don't care where it comes from, I don't want fragile lands in this country busted and plowed. But what is your personal feeling about such a proposal?

Secretary BLOCK. I haven't studied it. But as you just now presented it, those are not unreasonable points that you make in that bill. Did you say that the land would not be in crop?

Senator BUMPERS. I would prefer that the land—I don't have this in my bill. Senator Boren, who wants to be on this bill with me, is suggesting that we require the Farmers Home Administration to put that land in soil conservation practices.

Secretary BLOCK. Yes.

Senator BUMPERS. That is another one that you are torpedoing in your budget.

Secretary BLOCK. I believe the Farmers Home Administration has the discretion to do each of these points that you have gone through.

Senator BUMPERS. But it is not required.

Secretary BLOCK. Without legislation, it is not required. We are doing, certainly, some of those, if not—probably not all of those. But we are taking land off the market right now in the States where we have heavy pressure on land prices. In terms of collateral, we are not taking more collateral than is necessary to cover loans. In some places it may be that we do, but I don't think we do, necessarily.

Senator **Bumpers**. Let me just suggest this one thing here: You do have—the Farmers Home Administration, the director of the Farmers Home Administration, has the discretion now, and he does it and is doing it, on a kind of a la carte basis. He is telling these local offices they are not to resell this land.

LAND IN FMHA INVENTORY

In my State there are 20,000 acres of land in the Farmers Home Administration inventory. I have been trying to reach somebody at FmHA to talk to them about this. I have not been able to do it.

Mr. Secretary, it seems to me this morning, you could make a statement, if you would be willing to do it, to say that, until Congress can act on this, you are placing a moratorium on the sale of lands that the Farmers Home Administration now has in inventory or will acquire in inventory for the foreseeable future.

Secretary **Block**. We have made a statement like that, although we didn't say every State. There are some States that we really don't have problems in. But we have said that, and it has been done on a State-by-State basis.

I can't tell you which States, but I am certain that we are not selling land in Arkansas. We have made that press release down there in a blanket statement. Senator Harkin knows it is true, we have done it in Iowa and many other States.

Senator **Bumpers**. As a followup on that, is it your proposal not only to leave the land in inventory, but to rent it or seed it down maybe?

Secretary **Block**. We rent it. Right now, we rent it to family farmers.

Senator **Bumpers**. Well, I must say it seems to me that with the crisis that we have in overproduction, that is not a particularly good use of it. I understand why you want to generate some revenue from the land. But I think the farmers of this country need a statement from you that you were not going to rent it.

Do you know how much total land you have in the Farmers Home Administration inventory?

Secretary **Block**. I don't know. I can get that number for you.

Senator **Bumpers**. It is probably less than a million acres isn't it?

Secretary **Block**. I am sure it would be.

Senator **Bumpers**. Would you get that for me, Mr. Secretary?

Secretary **Block**. Yes, I will.

[The information follows:]

Preliminary FmHA reports show 1,920 farms with about 670,000 acres worth $350 million in inventory as of December 1984.

Senator **Bumpers**. Thank you, very much. And thank you, Mr. Chairman.

Mr. Chairman, I have some questions that I would like to introduce for the record from Senator Sasser to be answered.

Senator **Cochran**. It will be included in the record without objection. We ask the Secretary to see that the responses are filed as soon as possible.

[CLERK'S NOTE: Questions from Senator Sasser appear in the questions and answers section of today's hearing.]

Senator Harkin.

Senator HARKIN. Mr. Secretary, I just want to follow up on what Senator Bumpers just asked. I know you do have—it is not substantial, but it is not inconsequential—the amount of land held in Farmers Home inventory now.

I have a lot of farmers ask if perhaps there couldn't be a policy of seeding that land down rather than renting it out. I don't know if it is going to make a lot of money, renting it out.

Secretary BLOCK. No.

Senator HARKIN. I just think—well, from two aspects, one from just holding down some production, and second, just from the statement, kind of public policy statement that would be made, if you were to have that land seeded down, would do a lot of good. I would hope you would look at it.

I am getting more and more comments in from farmers who are nearby to land that Farmers Home has, and again, when you are talking about renting it out, I know you are saying family farmers. I will admit that in Iowa, but the bigger family farmers are not in too bad a shape, because they have the money to cash rent it right now.

Again, I just hope you would look at perhaps seeding it down this year, on a national basis. I don't think you are going to make much money on it anyway.

SIGNUP FOR ACREAGE REDUCTION PROGRAM

But the basis of my questioning that I wanted to pursue had to do with the signup this year. From what I have been able to see in Iowa, the signup is pretty big in the program this year. Is that your judgment, nationwide?

Secretary BLOCK. I think it will be very big nationwide.

Senator HARKIN. I do, too. Everytime I have had a meeting in Iowa, and I have asked farmers to raise their hands—well, the deadline is already passed, assuming this legislation, the deadline has been passed.

Secretary BLOCK. We have extended the time for signup for the 1985 acreage reduction programs

Senator HARKIN. 15 days?

Secretary BLOCK. No; until the 1st of April.

Senator HARKIN. OK. I think you are going to get a big signup. Well, now it is a 10-percent set-aside. We know from past history that a 10-percent set-aside does not equal a 10-percent reduction.

Do you anticipate, based on the history, what a 10-percent set-aside might lead to in terms of reduction? It seems to me it has been about 3 percent.

Mr. RUSSELL. You get about a 50-percent slippage off it, Senator. I get about 5 percent.

Senator HARKIN. 5 percent. That I think would be optimistic. I think history shows it is less than 5 percent when we have had 10 percent set-aside.

Mr. RUSSELL. You may be right.

Senator HARKIN. Again, you don't have the 10-percent reduction. Assuming average weather, we could possibly be looking at a very large crop this year. Do you disagree with that statement?

Secretary BLOCK. No.

COMMODITY DEFICIENCY PAYMENTS

Senator HARKIN. The exposure this year on corn is going to be $3.03 minus $2.55, or $.48 per bushel. I don't have in front of me what it is for wheat. But have you projected ahead, and do you have any kind of parameters as to what it might cost you in terms of what the deficiency payments are going to have to be made this year, knowing that you have got this huge signup and that you have this exposure on corn and on wheat—I don't know what it is on wheat, somebody tell me what it is this year? How much is it on wheat?

Mr. RUSSELL. The target is $4.38, and I think the exposure we are looking at is somewhere in the neighborhood of about a dollar.

Senator HARKIN. A dollar exposure on wheat. What would it cost you the next budget year?

Mr. RUSSELL. The advanced deficiency payments will be made in fiscal 1985.

Senator HARKIN. Except for the advanced deficiency payments, what is it going to cost you, total, for this program? You have to have some idea.

Secretary BLOCK. We have studied all this. We have it all laid out. I don't have the numbers in front of me but we have all those numbers.

Senator HARKIN. It is going to have to be pretty big.

Secretary BLOCK. It is. I think when we did it, at the time, we weren't anticipating quite as big a signup as we are getting, as you suggest. Now, we have a very, very large signup. We have all those numbers projected here and someone may dig them out.

Mr. RUSSELL. Senator Harkin, for fiscal year 1986, which would be the 1985 crop year, for feed grains, we are talking about $3 billion. In the case of wheat, we are talking about $3.1 billion.

Senator HARKIN. That is the deficiency payments?

Mr. RUSSELL. No; that is total net outlays. The deficiency payment plus net lending, price support loans. I would say of the $3 billion about $1 billion is deficiency payments.

Senator HARKIN. What were the deficiency payments on last year's crops for feed grains and for wheat? You say $1.7 million for what, feed grains?

Mr. RUSSELL. No; $1.8 billion for feed grains.

Senator HARKIN. What about wheat?

Mr. RUSSELL. Hold on just 1 second.

Senator HARKIN. Could you tell me what the corresponding numbers are for this year, for last year's crop?

Mr. RUSSELL. For the 1984 crop the deficiency payments were $1.6 billion, that is for corn. And for the 1985 crop, we are projecting about $1.7 billion.

Senator HARKIN. Just a minute, 1984, you are talking about last year's crop, you are estimating that the corn payments are going to be about $1.6 billion this year, this fiscal year?

Mr. RUSSELL. That's right, for the 1984 crop year.

Senator HARKIN. For the 1984 crop year. How about wheat? Well, look, if you can get it.

Mr. RUSSELL. We can get it. It is right here. For wheat, the 1984 crop, the estimate is $1.1 billion and for 1985, it is about $1.7 billion.

Senator HARKIN. So wheat and corn for 1985 are about the same, $1.7 billion and $1.7 billion, that is what you are estimating.

Mr. RUSSELL. Yes.

Senator HARKIN. That can't quite be right. It has got to be more this year than it was last year. Well, you are just saying it is just slightly more. Well, it is more than wheat.

Mr. RUSSELL. Yes.

DIVERSION PAYMENTS

Senator HARKIN. Now, my question, basically, revolves around that, Mr. Secretary. Last year we had a struggle in trying to get you to implement a paid diversion program. We had written into the law a requirement that if the estimated carryover were 1.3 billion bushels in corn, that there had to be a 10-percent paid diversion.

At first the Department estimated that there would be more than 1.3 billion and then it was a little bit less, when it finally came out it was 1.1 billion bushels slightly below 1.3.

Secretary BLOCK. Yes.

Senator HARKIN. Can you tell me the status of that carryover right now?

Secretary BLOCK. I understand it is just at 1.1 billion now.

Senator HARKIN. I understand it keeps going up all the time.

Mr. RUSSELL. With the production that we have right now, as of February, the projected carryover is 1.1 to 1.2.

Senator HARKIN. Total carryover?

Mr. RUSSELL. Yes.

Senator HARKIN. What was the trigger in the law?

Mr. RUSSELL. 1.1.

Senator HARKIN. Oh, it was 1.1 in the law. OK, I misspoke. It wasn't 1.3, it was 1.1. So you are at that trigger now?

Mr. RUSSELL. Yes, sir.

Senator HARKIN. Everything that I have been asking, Mr. Secretary, what I am saying is that it would seem to me—and I don't know, ask the economists—a paid diversion of 10 percent this year might really wind up costing less in the long term than what you are going to have to pay out in all those deficiency payments, because with a 10-percent paid diversion, you will get a higher corresponding reduction than you do in a 10-percent set-aside.

Therefore, I think by implementing a 10-percent paid diversion, while it might cost you some money, I think it is going to save you some money, because you won't have that large crop out there on which you will have to pay.

Secretary BLOCK. I think that is a debatable subject, Senator. We have gone through those reviews on other occasions, on many occasions, whenever we try to do a farm program.

We have arrived at this point in time, the signup period almost ended, and then I extended it a month. Most people have made virtually all their plans. I don't think we can be changing the rules of the game right now. I think you could debate what you are saying to be true or false, savings by spending the money cost more by spending the money. I don't think it is the time to be changing the farm program.

Senator HARKIN. I think you could have seen that last fall. Now I am a little disturbed when the last report came out on the estimated carryover. There wasn't one grain dealer, there wasn't one commodity broker, and certainly wasn't one farmer that believed those figures on carryover.

Nobody believed them and I think corresponding events have shown that it was not so. The initial reports on carryover were much over 1.1. Then right before that deadline approached it was just slightly below that trigger level, ever so slightly below.

Mr. RUSSELL. Senator Harkin, I think it points out the problems that we have when we legislate specific carryover figures into the law.

Senator HARKIN. The problem is that those numbers can be massaged, I think.

Mr. RUSSELL. You know, what I think you are saying is that we massaged the numbers. You are wrong on that. I would say that is not true. These numbers go through the same process that they have always gone through. They are cleared through an interagency process.

I would also disagree with you about the industry numbers relative to the carryover, because I talked to a number of people throughout the week prior to the October release of this report. There were a number of grain companies and others that projected the carryover at 1.1 and below.

So, I would just have to differ with you over the fact that we are massaging the numbers. We are not.

Secretary BLOCK. I would also add that the truth is it would have made life a little easier for me if it had come out on the other side of that trigger number. So if we were going to massage them, I think we would massage them the other way, anyway. So I don't think that argument would hold any water.

Senator HARKIN. Well, I do; and again, you are kind of swimming upstream against OMB. That is where I think the problem lies, right there. In terms of—we all pushed for 10 percent diversion. In fact you could have announced a 10-percent diversion even without the trigger at all.

Secretary BLOCK. True.

Senator HARKIN. You could have done that. And again, by the end of December or early January, you could have seen how the carryover was inching up and would be over that trigger level.

Announcement at that time of a 10-percent diversion would have been quite in time for spring planting, and again I think it would have gone a long distance, first of all for getting some money out there because this would have been a paid diversion that you could have done up front; and second, in the long term it would have saved some money because of the cut back of production.

I am saying penny wise and pound foolish. We could have had a paid diversion in the long run and perhaps have saved us some money. I guess that is just the point that I am making.

I just want to say one other thing. I just found out yesterday that there is an elevator bidding in western Iowa, for delivery of November, December corn at $2.10 a bushel. That ought to be factored in. What I am saying is the total exposure is going to be there this year.

Now the other is: Are you saying there is absolutely no chance of a 10-percent paid diversion?

Secretary BLOCK. Not at this particular time.

DIRECT LOAN PROGRAM

Senator HARKIN. All right. Now, Mr. Secretary, you were quoted on the radio, February 22, a radio commentary, CBS radio network: "I just want to assure producers that rely on Farmers Home Administration that we will have adequate funding for them in the direct loan program."

Now the figures that I have from Iowa are not that good. We have already used first, second, and third quarter moneys for direct loans. Because of the number in the pipeline there is no accurate figure available. My office is told there may be as little as $10 million left of the $118 million appropriated for Iowa.

Now what is happening, we are getting more and more calls into our office in Iowa from farmers who went in 2 months ago and who applied and were told they were eligible and are now being told it will be April or May until the office gets to the application. They are also being told they would have to switch from that to a guarantee if they want quicker action.

Just the other day, I got a call from a banker in southern Iowa. He said several of his farmers—that the bank had application pending for 30 days or more—they were told that they were eligible. No problem. Now, this banker has found out that he has been told they will be switched from the direct loan, insured loan, to the guaranteed loan.

Well, he is up in arms because, as you know, the insured loan is 10-point-something percent. The guaranteed loan is, in his area, 14-point-something percent. His farmers can't cash flow with the extra percent of interest that they were going to have to pay.

Now, in February, they said, "So long as you are producers, we will have adequate funding for them in the direct loan program." That is not what we are experiencing in Iowa.

What can you tell me about how much money we are going to have for this direct loan program and what can I tell this banker?

Secretary **Block**. We are going to have adequate money for the direct loan program for those who qualify. We are moving money from one quarter up forward, as you are already suggesting, in some States in order to satisfy these needs. I can't speak to the specifics of the situation, but the money will be there to do the job as I already said.

BACKLOG OF LOAN APPLICATIONS

Now, one of the problems, Senator, and I think this is the biggest problem, is the problem with enough manpower to manage this heavy load. You know how Iowa is right now.

Senator **Harkin**. This is true.

Secretary **Block**. Our Farmers Home people are just buried with applicants and people wanting help. I know the Governor has offered people out of his office to help us. We have transferred people over from our Extension Service. They are helping. The Soil Conservation Service and ASCS are providing people to process loans.

I think it is a manpower situation more than anything. We just added 2,000 new employees also—that is nationwide—to try to get this job done. I think that is the biggest problem, really.

Senator **Harkin**. I see here, my notes tell me that in Iowa they are hiring 93 employees and that SCS and ASCS have joined to help. If my figures are right, we have used the first, second, and third quarter moneys and we don't have nearly enough left in the direct loan program in Iowa to meet those farmers who were told more than 30 days ago that they qualified and it would just be a matter of time until they get it. Now they are told to go to the guaranteed loan program.

Now, if you want case histories on this, I will get them to you. I can get you these case histories of these farmers that are being told, "Go to the guaranteed loan program now," even though they were told before that it would be direct.

Now, I don't have the recent data, but as of January 30, we had almost 3,000—2,979 applications pending at that time. There is no way, no way, if this is true, that there is only about $10 million left, no way that this is going to handle that in Iowa.

I want to know what is being done to get funds in Washington. Use a reserve fund? You have a reserve fund.

Secretary **Block**. There will be money. We will be moving more money into Iowa. I don't know when or how much, but definitely there will be more money coming into Iowa because it will have to be there.

Senator **Harkin**. How much is in the reserve fund? Do you know?

Secretary **Block**. I don't know.

Senator **Harkin**. Does anybody know?

Secretary **Block**. I will provide that for you, Senator. I don't have that.

Senator **Harkin**. In term of repooling, is that repooling effort pushed?

Secretary **Block**. We are already doing it some.

Senator HARKIN. I just urge you to do that, and do what you can to get those additional people on, because I am getting calls that they are going to its office at 8 o'clock in the morning and there is already a line there. They are waiting all day, sometimes they don't get in to see someone. So, I will tell you, it is a big problem.

STUDY OF FARM FINANCIAL SITUATION BY USDA ECONOMISTS

The last thing that I wanted to cover, Mr. Chairman, if you will indulge me just 1 second here. The Washington Post had an article which said that not a single one of the 400 economists in USDA had been assigned to look into the farm credit crisis.

Now, I just quote from that article; I am just reading what is in the paper. None of the 400 economists in the Agriculture Department's Economic Research Service had been assigned full time to study the issue of the farm credit thing. Much of the analysis has been left to eight professors at Iowa State University.

Now let me quote,

> "I am feeling most uneasy that we do not have answers and we are trying to gear up to produce some," said John Lee, Jr. "We do acknowledge that none of those economists have been assigned full time to the debt crisis, although six or seven have been assigned part-time to work on bits and pieces."

I just want to know—I don't want to believe that is true.

Secretary BLOCK. That is not true. This has been brought up three times this morning.

Senator HARKIN. I am sorry.

Secretary BLOCK. I would be glad to answer it for you, Senator. I want to be sure that the record shows what we have been doing and have done.

Mr. RUSSELL. Senator Harkin, I must admit that when I read that article over the weekend, I was taken aback, too, because up until Friday, I was Deputy Assistant Secretary for Economics. I have been back in the Department for the last year.

One of the most important issues that we outlined while I was Deputy Assistant Secretary for Economics was the credit issue. As I stated earlier in response to a question from Senator Andrews and Senator Abdnor, we have a credit section within the Economic Research Service that has about 10 or 12 agricultural economists. They spend time working on finance and credit issues. They put out a quarterly report which is called "Agricultural Finance," which is a basis for a lot of the credit and debt information that we have.

I think that the Department has done a very, very good job of putting together the statistics of the farm financial situation. I think that article is quite inaccurate and I would not agree with it.

Senator HARKIN. So you do have some full-time economists working on it?

Mr. RUSSELL. Yes, sir, without question.

Senator HARKIN. Have you come up with any data, some stuff that we can look at of recent note?

Mr. Russell. Yes, sir. If you would like for the record, we would give you a copy on your way out. What we have done, Senator Harkin, is gone through and looked at the debt-to-asset ratios for family farm operators. Those are people in the sales category of $50,000 to $500,000 in gross sales. That is as of January 1, 1985.

I would be glad to provide you with those numbers for the record.

[Clerk's note: The information is printed in response to a previous question on pages 22–56.]

Senator Harkin. OK. That is as of January 1.

Mr. Russell. 1985.

Senator Harkin. Two months have passed. Do you have any more updated material?

Mr. Russell. We are in the process right now, as part of our farm productions expenditure survey. We have two pages of questions on that survey that are going out nationwide right now. We will be getting that information in March and probably publish it in early April. That is probably the most extensive national survey.

Senator Harkin. Have you looked at the studies done by Iowa State, I mean recently? They have come up with, I think, some pretty solid data. I know you might want to question it, but I would, at least, like to have you look at it.

Mr. Russell. We have looked at a lot of the information that Iowa State has done, and I won't quarrel with it. I think they have some very interesting information, particularly the impact on the agribusiness sector.

NUMBER OF FARMERS FACING FINANCIAL CRISIS

Senator Harkin. That's right. Their data shows that as of within the last few weeks, they say that 28 percent of the farmers in Iowa are slipping toward insolvency very rapidly. Do you agree with that?

Mr. Russell. I don't know about the Iowa numbers. I can't speak to that particular State. I would say nationally, 5 percent. But also I would say that we are saying of the 680,000 commercial family farm operators, which are those in the sales class of $50,000 to $500,000, there are somewhere in the neighborhood of 4 to 5 percent that are facing, as you say, insolvency.

Senator Harkin. I guess that is the problem with averages sometimes.

Mr. Russell. Without question, your part of the country, in Iowa, in northern Minnesota, in Nebraska and Missouri, the problem is much more severe and we understand that.

Senator Harkin. OK. In understanding that, that need has to be met out there. If the studies at Iowa State are correct or even close to being correct, the deficiency situation, not only on our farms but, as you said, on the agribusiness sector in Iowa, is going to kill us.

I mean, if we were looking at 4 to 5 percent in Iowa, I would be disturbed by it. But when you are looking at 28 percent—and their data also shows that those farmers have the bulk of the farm debt—they are going to drag everything down in Iowa.

So it doesn't do us much good in Iowa to say, "Well, here is the national average, so we don't have to do much." It is like, I was just down at the hearing at Health and Human Services, like infant mortality rates. It isn't bad nationwide, but if you are from the inner city and the ghetto where the infant mortality rates are skyrocketing, you don't care about the national average. It is like this. We don't care about the national average right now. We are looking at 28 percent of our farmers going into insolvency.

Mr. RUSSELL. Senator, I would say this: Certainly in your State of Iowa, the problem is the most severe of any State in the country.

Senator HARKIN. Is Iowa still not part of the Union?

Mr. RUSSELL. I would say that the recent debt-restructuring revisions announced by the administration will allow many more farmers to become eligible for debt restructuring in Iowa than there will be in most other States in the country.

Therefore, we think that a major beneficiary of that program will be the State of Iowa and those farmers who are in financial distress.

Senator HARKIN. Well, all I can tell you is that in Iowa, the number of people who have been eligible for that debt-adjustment program is just almost nil. We have had, as of January 30, we have had six loans approved in Iowa, six guaranteed loans.

Mr. RUSSELL. That is the commercial portion of the program.

APPLICANTS FOR SET-ASIDE PROGRAM

Senator HARKIN. You want to talk about the set-aside?

Mr. RUSSELL. There are over 100,000 people nationwide who have applied for the set-aside program.

Senator HARKIN. Let me tell you about Iowa. I am telling you about a State that is dying. Initial requests as of January 30—I don't know what has happened in the last month—6,985 requests, 529 were granted a set-aside. Is that working?

Secretary BLOCK. I think you will find that it will work.

Senator HARKIN. Well, Mr. Secretary, it has to work now. I mean these people are dying out there. I mean it doesn't matter what is going to work later this summer or this fall.

Secretary BLOCK. We have more than a month, so I am sure there has been some change in that last month.

Senator HARKIN. I hope so. I am trying to get the February figures. I only have to the end of January. I am just trying to stress that I know you have to look at things nationally.

I know that you have to look at the national figures and the averages and stuff, but you have got to look at some specific cases and some specific States that are not the average. It is way beyond the average and programs that might be developed that might work to solve the problem looking at the averages aren't doing it at all. Something different has to be done. That is the only point I am trying to make on it.

WORLD MARKET PRICES

Now last, of course, this is a running argument that we have about the overpriced commodities, saying that you want to bring the price down so it will be more competitive on the world market.

I checked the other day; the price of corn in Chicago is $2.70 a bushel, in Rotterdam it was $3.75, and the domestic price in Europe was $5.60. Can you tell me what the world price of corn is, Mr. Secretary? Is it $5.60, $3.75, $2.75, or is it even yet lower? Where is it?

Secretary BLOCK. I can't tell you the number for the world price of grain. But there is no question about it, when someone wants some grain in the world, they look around the world and find out where they can get a competitive price—wherever they can find quality goods at a competitive price. They don't just go buy it from someone because they like that country as a friend.

As long as they can find grain that is quality at a cheaper price, they probably would go get the grain. I guess I am not sure what your point is.

Senator HARKIN. My point is that you can drive the price to $2 a bushel and as long as you have domestically supported prices, as you do in the European Community. As long as we have government-planned economies that subsidize grain, you can drive it down to 50 cents a bushel. You haven't accomplished a great deal.

Maybe you have heard my statement on this. Using that kind of logic, I have the perfect solution, then, for our automobile problem. I now have the solution of how we can drive Toyota, Datsun, Mazda, we can drive them all out of business, easily. We can capture the entire world market in automobiles.

All we have to do is tell Ford to sell all their Mustangs for $1,000 a car. It will work. Well, I mean, it won't work, because Ford would go bankrupt before they would capture the world market.

That is what we are telling our farmers. Get your price of grain down to $2 a bushel. They would all be busted before we captured any world markets with that kind of a process. It seems to me it is using the same kind of logic. You can't do it because the supply on the world market right now is more than the demand.

Secretary BLOCK. Senator, the Government doesn't tell Ford what to sell its cars for. But the truth really is the Government doesn't tell the farmer what he has to sell his grain for, either.

You know if Ford is trying to compete in this world market, admittedly even in cars, it is not a completely free market. Likewise, it is not an absolutely free or fair market in grains. But in both cases, the world price tends to be somewhere around what people are willing to pay for that product. They will shop around to find out where they can get it at a cheaper price.

Domestically, the European Community has all of these high price supports. It tends to make that country produce too much. They subsidize some of those exports in the world markets. We know that is a terrible burden on the American farmer. It is a problem for us. We have been fighting it for years.

The new farm program does have a requirement that certain things be done in response to it.

Senator HARKIN. Well, in your prepared testimony you say that the choice before us is whether we want to maintain the costly current programs and become even less competitive, or whether we have a market-oriented program. Mr. Secretary, I would respectfully submit that those are not our only two choices.

MARKET ORDERS

Secretary BLOCK. There is one more. I agree with you.

Senator HARKIN. You know what I am getting at.

Secretary BLOCK. I know what you are talking about.

Senator HARKIN. Do you support market orders?

Secretary BLOCK. I support market orders with flexibility.

Senator HARKIN. But you do support the concept of market orders? You have got to agree that they work?

Secretary BLOCK. Right.

Senator HARKIN. Well, you see a market order is Government sanctioned.

Secretary BLOCK. Right.

Senator HARKIN. So if you support the market order to citrus and perhaps some other crops, why can't we have the same concept apply to our food and feed grains.

Secretary BLOCK. Well, market orders—one or two crops do but we don't accept that. They do not deny entry into the market. They do not deny individuals the right to produce. They do not impose quotas. So producers can plant more trees or raise more grapes or whatever.

Marketing orders are not a panacea, I can point out. I guess you can talk to some of the people that are in the grape industry or the raisin industry. They are dying, just like Iowa is dying, as you suggest. It is not a panacea to have marketing orders.

Senator HARKIN. The marketing orders do redistribute the amount of commodities that can be placed in that market.

Secretary BLOCK. Well, some do, but for the most part, in years of big crops, more goes to market than in years of small crops. You don't just straight line the size of crop.

Senator HARKIN. Tell me why, last fall, late last year, I saw on television, the bulldozing of oranges in California because the market order demanded that? Why didn't they dump them, sell them for a penny a piece?

Secretary BLOCK. I don't know the particular film you saw, but one of the reasons was that there are certain size limitations. When they are below a certain size, they can't use those oranges. There are certain quality requirements.

The marketing orders that this administration supports are orders that require certain quality standards to be met, that provide for certain promotional programs so that the industry does bind together to promote.

We do accept prorates so long as as they are flexible. We don't support programs that restrict entry into the business, that restrict products from markets.

Senator HARKIN. Do you support the tobacco program?

Secretary BLOCK. We support the tobacco program, but we are looking to change the tobacco program. We are presenting legislation that provides change.

Senator HARKIN. How about the peanut program?

Secretary BLOCK. There is change in the peanut program. It is in the farm bill. We have already presented that.

Senator HARKIN. Not in the tobacco, there isn't.

Secretary BLOCK. No; the peanuts are. The tobacco will be coming.

Senator HARKIN. What is wrong? You know, I said there is that other choice, the mandatory choice. Now again, I don't believe that we ought to in any way pass legislation that forces people to do something. But I see nothing wrong with permitting the farmers a voice and a vote on whether or not they want to engage in that kind of market order philosophy.

That is what brought about market orders because the farmers themselves wanted that kind of an approach. What is wrong with having a mandatory program and let the farmers run it. If they want it, fine, if they don't, fine.

We haven't had a farmer referendum on a wheat program, Mr. Secretary, since 1963. We haven't had it on corn since 1956, 1957, something like that. What is wrong with a having a referendum?

Secretary BLOCK. If we are unable to get a farm bill this year we can go into next year and have things ready. That referendum has to be taken.

Senator HARKIN. Do you anticipate that we will not have a bill ready at that time?

Secretary BLOCK. I anticipate that we won't have a bill in August, if we can get a referendum—which is our responsibility—we will be beginning to see the results.

Senator HARKIN. I would like to see it, too.

Secretary BLOCK. I don't know the details. We will get those for you. We should know in a month.

Senator HARKIN. I would like to see it, what farmers want in terms of a mandatory program, how they would vote. Again, I would like to see that in terms of a farm bill. I would like to see a mandatory program too, perhaps next year. Thank you, Mr. Secretary.

ARTICLE SUBMITTED BY SENATOR ABDNOR

Senator COCHRAN. Senator Abdnor has requested that you respond to an article in the Farm Journal published in mid-January 1985, on the analysis of John Martin.

We will give you a copy of that article. He would like your response to that, which we will make part of the record.

[The article and the Secretary's response follow:]

ARE YOU READY FOR $2.40 WHEAT AND $2 CORN?

[By John Marten, Farm Journal Staff Economist]

■ Ah—you can almost feel the pleasant tingle from being "wrapped in the warm blanket of recovery" to quote Presidential candidate Reagan from his "farm" stop in Iowa last September. But wait. Is it from a worn-out electric blanket? You can decide.

Two warnings: Only certified market-oriented folks with low debt-asset ratios or high nonfarm incomes should continue reading unless seated. And, of course, more than the normal chance for change is involved in the analysis below, since this was written in mid-December. Trial balloons were being released almost daily by the Reagan/Stockman/Block trio. Here's the detail on one set of balloons.

The "no frills" crop plan floated by the Administration contains:

1) ending the farmer-owned reserve;

2) a $10,000 payment limit and a $200,000 CCC loan maximum;

3) full "recourse" loans set at 75% of the last three years' farm price for soybeans, cotton, wheat and feed grains;

4) a five-year phase-out of target prices, dropping 5% a year from 100% of the last three-year average farm price in 1986 down to the loan level (75%) after 1990;

5) a modest conservation reserve designed to idle about 20 million acres of highly erodible land;

6) all other acre-idling programs would be discontinued (no ARP, PLD or PIK), so *all production* would be loan and target "eligible."

I've estimated the results in the table for the three key crops. I assumed normal weather, a continued strong U.S. dollar, more big deficits in the $150+ billion area and current interest rates.

It's a "cold turkey"approach. *Recourse means you must repay the loan!* So the effective price support would drop from the 1985 loan rates listed in the table to nothing! Wow. *So there would no longer be a support price for any crop!* The loan rate really would be used only by those who couldn't get a loan from normal sources. Who'd want a $1.68 corn loan in 1988—let alone one that couldn't be forfeited!

As the table shows, the five-year "gradual phase-out" of target prices turns into only a two-year removal when practical numbers are used. So, corn deficiency payments would run $5 billion in 1985; about $2.5 billion in 1987; and near $0 in 1988.

Economic consequences of the policy shift described herein are many. Here's a partial list.

- Farm exports would go up perhaps 20% by 1987 if prices dropped about 30% as shown. Eventual gains of up to 40% or 50% would be possible *if* export competitors didn't retaliate.
- Food price inflation would be very low until about 1990 as the cheaper raw farm prices worked their way through the system.
- Initial farm-income losses of $11 to $14 billion would drop net farm income to $6 to $9 billion by 1988.
- Hog prices likely would fall to $30 per cwt. or less in 1987 as farmers tried to "market crops on four legs." Farmers in wheat states like Kansas would have the highest bankruptcy rate.
- Severe stress would put increased pressure on farm suppliers.
- FmHA failure rates would reach or exceed 80%—leading to the eventual write-off of perhaps $20 billion of the current $25- billion loan total.
- The farm credit system probably would fail if Uncle Sam didn't step in.
- Perhaps 40% of all farmers would fail by 1988—and these hold over half the $190-billion private farm debt.
- Land prices would decline another notch along with cash rents—a structural shift toward direct operations by outside investors would develop due to the tax law.
- Soybean prices would still average near 2.4 times corn price—about $4.75 a bushel with $2 corn.
- Surviving farmers with good marketing skills and some cash in hand would do relatively well in the '90s—especially if they bought more land

and machinery at the bottom of the late-'80s collapse.

- With no reserve, food-price instability would become an issue.

Perhaps the "trial balloons" analyzed herein are just that. The immediate removal of price supports with a two-year income assistance phase-out seems radical when farmers already are under severe stress. Both the treasury and trade deficits will need to be trimmed before "free market" policies have any chance of being a "fair market" policy for U.S. farmers. ◄

The Reagan price plan

Crop	Year	Target* price	"Recourse"** loan rate	U.S. average*** farm price
Corn ($/bu.)	1985	$3.03	$2.55	2.55
	86	2.82	2.11	2.20
	87	2.35	1.86	2.00
	88	2.02	1.68	2.00
Wheat ($/bu.)	1985	$4.38	$3.30	$2.30
	86	3.41	2.56	2.60
	87	2.95	2.32	2.40
	88	2.48	2.07	2.40
Cotton (¢/lb.)	1985	81¢	57.3¢	55¢
	86	61	45.2	46
	87	51.3	40.5	45
	88	43.8	36.5	45

*Assumes 100% of last three years in 1986, 95% in 1987, 90% in 1988
**75% of last three years' farm price
***USDA actuals plus author estimates

Secretary Block. In our view, Mr. Marten's analysis in the Farm Journal portrays an inaccurate picture of the Administration's farm bill. Some of the provisions he says are contained in the bill are not correct. For example, the Administration is not proposing recourse loan rates for program commodities. Moreover, we believe the analysis presented overstates the impacts of the Administration's bill. The price projections shown in the article are Mr. Marten's projections, not USDA's and they are clearly too low. We also do not subscribe to the other dire consequences that Mr. Marten indicates would result from the enactment of the Administration's farm bill.

AVIAN INFLUENZA

Senator Cochran. Senator Specter.

Senator Specter. Thank you, Mr. Chairman.

Mr. Secretary, I am sorry I couldn't be over here until now. We have problems over here as you have over there. I would like to ask about a specific item, avian flu, a major problem in Pennsylvania last year. I think we made significant progress on it, but some things were not properly handled. Perhaps we can do something about that?

The question today relates to the proposal to cut research and education funding by $122 million in fiscal year 1986, which appears to me to have significant impact on efforts which may be made to correct the kinds of conditions that led to the destruction of millions of chickens and turkeys last year.

Considering all the problems, couldn't there be some kind of an effort by our Government concerning that cut?

Secretary BLOCK. I am trying to understand the question. The policy is that we are trying to reduce the cost of research. We have kept the research funding in the competitive grants. I think your concern is that some cuts would be for something important such as the poultry influenza threat?

Senator SPECTER. That is my point. What would the impact be on avian influenza?

Secretary BLOCK. I can't speak directly to that because I don't know how much might have been going on with avian influenza. I am not sure whether the special grants cut would affect avian research or not.

Senator SPECTER. Would you take a look at it or have staff look at it?

Secretary BLOCK. I am informed there are no special grants for avian influenza research so that would not be cut. That would not be part of the cut.

Senator SPECTER. Could the cuts affect the ability of someone who wanted to study avian influenza to get such a grant?

Secretary BLOCK. We have research. We have ongoing research. We won't get special avian research. We continue to use the ongoing program of research we have which is not to be cut.

Senator SPECTER. What programs are there for avian influenza?

Mr. DEWHURST. I don't know. ARS spends $15 million a year for poultry research. That budget is the same in 1986 as in 1985. I don't know what particular funds are for avian research.

Senator SPECTER. Could you check that?

Secretary BLOCK. Yes, sir.

[The information follows:]

Research work on avian influenza is carried out at one location in ARS, the Southeast Poultry Research Laboratory, Athens, GA. The current effort in fiscal year 1985 is $614,000.

Research is being conducted to determine the disease-causing capabilities of avian influenza isolates. Special attention is given to isolates which occur as multiple introductions into the same population.

Antiviral agents are being explored for their potential to reduce avian influenza losses.

Research effort includes the improvement of emulsions and adjuvants to be used to enhance the effectiveness of avian influenza vaccines. The limitations of avian influenza vaccines in mature, laying leghorn hens are also being identifed.

More basic studies are in progress to elucidate the mechanisms involved in the expression of virulence to cause acute disease in avian populations.

Senator SPECTER. I don't understand the question of the amount of money, which is certainly the big problem of avian influenza research. I am interested in areas of expanding that research. The cuts are coming. How is that going to affect the ability to prevent this problem in the future?

I will submit that and my other questions for the record.

SUBMITTED QUESTIONS

Senator Cochran. I have some additional questions which I will submit in writing. I ask that responses be produced to the committee. We also have additional questions from other Senators which we will submit to you to be answered for the record.

[The following questions were not asked at the hearing but were submitted for response for the record:]

QUESTIONS SUBMITTED BY SENATOR COCHRAN

COST ESTIMATES OF PROPOSED FARM PROGRAM PROVISIONS FOR WHEAT, FEED GRAINS, RICE AND UPLAND COTTON

Question: Would you please provide the cost estimates for the following proposed farm program provisions for wheat, feed grains, rice and upland cotton:

1. Retain non-recourse loan marketing tool, without limitation. Compute loan value as 85 percent of moving average of U.S. market price. Moving average to be computed using the previous five-year series, deleting the highest and lowest prices.
2. Retain income protection--target prices. Compute target price as 130 percent of current loan value.
3. Retain $50,000 payment limitation.
4. Retain acreage reduction and paid diversion provisions, to be used at the discretion of the Secretary.

Answer: I will provide for the record the cost estimates for the proposed farm program provisions for wheat, feed grains, rice and upland cotton.

Proposed Farm Program Provisions:

- Non-recourse loan program with loan rates at 85 percent of a moving average of U.S. market prices for the previous 5 years, excluding the highest and lowest of the five figures.
- Target prices at 130 percent of the loan rates.
- Deficiency and diversion payments limited to $50,000 per person.
- Authority for acreage reduction and paid diversion programs is retained.

These provisions were examined for the 1986 through 1990 crops. The base for comparison was the "Current Services" budget, which assumes a continuation of current law. Since provisions for programs other than these four--feed grains, wheat, upland cotton and rice--were not specified, we have assumed that current law will remain in effect for the others.

For the FY 1987-91 period, Commodity Credit Corporation net outlays under the Current Services base were projected to total $76.8 billion. Senator Cochran's proposals for the four programs would reduce this total to about $52.6 billion. However, the proposal would still exceed the Administration's Bill, the Agricultural Adjustment Act of 1985--AAA--by some $25 billion over the FY 1987-91 period.

As Compared to the Current Service Base:

The Cochran proposal would result in reductions in both net lending for price support and in deficiency payments because of the lower loan rates and target prices. In general, planted acreage is projected to be lower because of the reduced incentives to overproduce. Exports would be higher and stocks lower.

As Compared to the Administration Bill:

The Cochran proposal would result in lower planted acreage because of the greater acreage reduction requirements--including cash diversion--that are not present with the AAA. Production would be lower, but exports and domestic use also would not reach levels projected under the AAA. Thus, stocks are higher under the Cochran proposal, as are deficiency payments and net price support lending.

EXPORTS

Question: You state in your testimony that "a portion of the direct export credit will again be used in the blended credit program which was begun in 1983;" however, it has been reported in the Department's notes that direct credit will not be available in FY 1986. Which is correct?

Answer: Both statements are correct. The Omnibus Budget Reconciliation Act of 1982 provided for $175 million to $190 million to be used for the expansion of agricultural exports in each of the fiscal years ending September 30, 1983, September 30, 1984, and September 30, 1985. Funds provided under this Act were used to initiate the blended credit program in FY 1983 in an effort to strengthen U.S. competitiveness in foreign markets. Under this program credit is offered for up to three years on a combination of interest-free direct credit under the Export Credit Sales Program (GSM-5) and credit guarantees under the Export Credit Guarantee Program (GSM-102). The combination of direct and guarantee credits is blended on a sale-by-sale basis at a ratio of, at least, one part GSM-5 to four parts GSM-102.

In addition to the funds provided under the 1982 Omnibus Budget Reconciliation Act, Congress further provided under the 1984 Agricultural Programs Adjustment Act an additional $150 million to be used in FY 1985 to assist in the development, maintenance and expansion of international markets for U.S. farm products. Under these two Acts a program level of $325 million in direct credit has been authorized for use in FY 1985. A portion of the direct credit has been earmarked for use in the blended credit program to help meet foreign subsidized competition. However, in FY 1986, no direct credit program is planned at this time.

COMMODITY CREDIT CORPORATION

Question: As you know, Mr. Secretary one of the items for the agriculture credit package approved by the Senate last week was to allow farmers to receive normal price support loans this spring. This will obviously have an impact on the Commodity Credit Corporation. With the current situation, would it be possible to make these loans this spring without Congressional action to increase the borrowing authority of the CCC--which is currently $25 billion?

Answer: The proposal to advance 1985 crop loans this spring would significantly increase fiscal year 1985 CCC outlays above those estimated in the President's Budget. The additional fiscal year 1985 loans under this legislation could exceed $9 billion. With about $20 billion of the $25 billion borrowing authority already in use, there is not sufficient borrowing authority available to operate this program. Either the ceiling would have to be raised or a supplemental would be needed to restore CCC realized losses in order to carryout this legislation.

Question: Is it not true that a supplmental will be required this year even without enactment of this provision? Can you give us any indication of what that supplemental amount might be? Are you working with OMB and can we expect a budget request soon?

Answer: Our current projection shows that CCC will have less than $1.0 billion by the end of May. This is less than the operating margin we would like to have. Thus, we are considering the need for providing CCC a more comfortable operating margin. We are consulting with OMB on this matter.

Question: Again this year, permanent, indefinite authority has been requested to reimburse the CCC for net realized losses. As you know, Congress has never approved this and probably will not do so this year. What is your estimate of the amount that will be needed to reimburse the CCC for fiscal year 1986?

Answer: Restoration of losses totaling $13,332,030,000 is needed for fiscal year 1986. If a supplemental is received in fiscal year 1985, then the fiscal year 1986 appropriation needed would be reduced accordingly.

Question: In the General Provisions portion of your budget request, there is a proposal to cap the Small Business Innovation Research (SBIR) Program at the rate authorized for fiscal year 1985. The proposed provision is written in such a way so that it would have a government-wide effect. Why is this being proposed?

Answer: At a time when many Federal extramural R&D programs are being straightlined or reduced, it seemed counterproductive to increase the SBIR set-aside by 25%. Capping the SBIR program at the 1% set-aside rate will help maintain funding for the Department's primary extramural R&D programs. The lower set-aside will save about $680,000 for USDA's primary extramural R&D programs, which are mostly located in the Cooperative State Research Service.

Question: Is this provision contained in the budget requests for other departments?

Answer: This provision is also contained in the proposed appropriation language of other departments and agencies that have participated in the SBIR program.

QUESTIONS SUBMITTED BY SENATOR MCCLURE

GRASSHOPPER CONTROL

Question: I appreciate your presence here today and your recent efforts to work out recent programs to aid the American farmers. I hope that the recent changes made to the farm credit program announced by the President last September will be used by the Farmers Home Administration to the benefit of the farmers and bankers of the country.

I am especially glad to have the chance to ask you a few questions, here today, regarding the upcoming hearings on Agricultural Appropriations. My main concern at this time is the adequacy of funding for the APHIS Contingency fund for grasshopper control on public rangelands. At the present time, the APHIS contingency fund has only $1.5 million dollars to control an expected outbreak of grasshoppers on public rangelands throughout the west. Idaho alone has 9.5 million acres which APHIS expects to be economically infested or having more than 8 grasshoppers per square yard. Last year some of the farmers in Idaho had up to two hundred hoppers per square yard.

As you will remember, last year during your visit to Idaho, you promised adequate resources would be made available to run the program in 1985 should it appear that an outbreak might occur. APHIS surveys have shown that 1985 could be the worst outbreak in 30 years. We must have an adequate program to handle this problem. The owners of the public rangelands, the Federal Government, must make the effort to be good neighbors.

Instead of being a good neighbor, APHIS has come out with a new program which not only does away with the original cost sharing program but replaces the Federal Program with one which the State is expected to pay for half the costs associated with spraying for grasshopper control on FEDERAL lands. I and the 10 other Senators of the Western States Pest Control Coalition feel that this program announced by APHIS on January 7, 1985, is unfair and should be rescinded and the old program put back in place.

Please comment on how you will approach this problem and provide the relief promised to the western states last year.

Answer: We have committed up to $1 million for grasshopper control in 1985 - $500 thousand provided by Congress specifically for this purpose and up to $500 thousand from the APHIS contingency fund. Control efforts will be conducted on Federal rangelands as infestations reaching economic levels occur. We plan to share the costs with the States on a 50-50 basis. However, it is impossible to predict the level of infestation we will face. The survey conducted last fall is only one indicator. Climatic conditions in the spring play a crucial role in grasshopper development. Therefore, we cannot predict with great accuracy what the grasshopper infestation will be until late Spring and early Summer. Even then weather conditions can change treatment requirements. By earmarking $1 million for grasshopper control, we will be able to plan and implement a more biologically effective program.

We believe that our policy to pay 50 percent of the cost of grasshopper control on Federally owned rangeland is equitable. To help defray the costs, we suggest that the States and counties use Federal payments they are receiving in lieu of taxes to help pay their share for grasshopper control.

We will continue to work closely with the States to monitor grasshopper infestations and will share the decisionmaking on treatment locations with them. Should grasshopper infestations create a more severe economic threat than usual and control needs exceed available resources, we will reevaluate program plans.

QUESTIONS SUBMITTED BY SENATOR KASTEN

DEBT ADJUSTMENT PROGRAM

Question: Mr. Secretary, last month the Senate passed S.Res.79, which outlined, among other things, the steps that the Administration had agreed to take to help address the farm credit crisis. One of the things the Administration agreed to do was to report periodically on the progress of the Debt Adjustment Program (DAP).

Can you give us an idea of how the DAP is working so far, with particular reference to how many lenders are participating in the program and how many farmers are being helped?

Answer: At the end of February, FmHA had obligated about $60 million in guaranteed operating loans, of which 10 percent had been used to guarantee 35 loans under the debt adjustment program. To date, 340 applications have been reviewed for the adjustment program.

We expect participation to increase as a result of the recent change in the program to allow interest reductions in lieu of principal write-downs in order to qualify. A recent survey of agricultural bankers by the American Bankers Association showed that only half of the bankers would be willing to use the debt adjustment program as originally proposed with the minimum 10 percent write-off of principal. Over 80 percent of the bankers, however, indicated that they would be willing to use the program under the interest write-down option.

These bankers estimate that with the interest write-down about 16 percent of their borrowers could be assisted under the program.

Question: What problems have there been or are there likely to be in implementing the DAP? In particular, are personnel shortages in FmHA offices a problem generally; in particular, are they to your knowledge a problem in Wisconsin?

Answer: Some 150 field personnel from ASCS and the Extension Service have been assigned to assist FmHA in states with the largest case loads. Non-profit organizations have volunteered about 60 people, and state governments have assigned nearly 130 people to assist. FmHA has authorized hiring of 1,300 temporary employees to help during periods of heavy loan processing, and county offices have contracted with over 400 farm management and credit specialists to help borrowers maximize cash flow and restructure debt. The staff hiring announced in mid-February included 60 temporary personnel for Wisconsin.

Further, over 100 FmHA personnel have been assigned to "jump teams" who will work with FDIC to identify borrowers of a commercial bank in liquidation who may qualify for FmHA operating loan guarantees.

Also, we have promoted the approved lender program, under which private lenders do most of the paperwork and can obtain FmHA's approval of guaranteed loan assistance within 5 days of submission of a completed application.

USER-FEES FOR MEAT AND POULTRY INSPECTION

Question: Mr. Secretary, the Administration has proposed the imposition of user fees on the meat industry for federal meat inspection services. At the end of three years, the meat industry will bear the entire cost of these services under this proposal.

If, as I believe, the American consumer is the primary beneficiary of federal meat inspections services, is it fair to make the meat industry bear the entire cost of those services? Even the Grace Commission rejected the idea.

Answer: The Grace Commission did recommend user fees for USDA-performed poultry inspection. Our current proposal extends the concept to the entire meat and poultry inspection program. The regulated industries would pay for federal inspection as part of the cost of doing business, just as they now pay for equipment, products, supplies, and their own employees. This proposal will merely add a fraction of a cent per pound, on the average, to what the establishments are already paying to ensure that products are safe, clean and wholesome, and properly packaged, stored, and shipped.

Question: Why is the proposed user fee to be paid to the Treasury, like a tax, rather than to USDA? Does not this undermine the argument that this is a true user fee rather than a new tax?

Answer: We have chosen to have the receipts deposited into the general funds of the Treasury so that there could be no question but that the funding level of this program will be determined through the formal appropriation process and not by the amount of fees paid by the regulated industry. By doing this we hope to alleviate concern that the industry could, through its payments, influence the program in a manner inconsistent with the objectives of the meat and poultry inspection acts.

Question: Will it not be cumbersome and costly to administer?

Answer: Undoubtedly there will be some added administrative costs. But the Food Safety and Inspection Service (FSIS) already has a system in place for charging plants overtime costs. In 1985, these reimbursements to FSIS are estimated to amount to $38 million. Fee-supported programs for voluntary inspection and grading have existed in USDA for many years. Administrative costs for these programs have not been excessive.

QUESTIONS SUBMITTED BY SENATOR CHILES

AGRICULTURAL RESEARCH STATIONS

Question: Mr. Secretary, two years ago the Agricultural Research Service (ARS) proposed elimination of several important research stations in Florida. The committee expressed its concern over this proposal by including bill language directing that current efforts at the Agricultural Research Stations at Belle Glade and Lake Alfred, Florida, be continued and that participation in the soil, water, air, and plant (SWAP) program located at Fort Pierce, Florida, be maintained. Is it the intention of the USDA and ARS to maintain these stations in Fiscal Year 1986 at the past funding and service levels?

Answer: Yes, it is.

Question: Would you detail for me the Department's recommendations in regard to these stations?

Answer: At Lake Alfred, ARS will support its citrus engineering program in 1986. We also intend to strengthen the program by better linking it with the ARS Horticultural Research Laboratory at Orlando to conduct research on citrus production systems including pesticide application research. At Belle Glade, ARS will continue the sugarcane engineering program in 1986. This program will also be strengthened by integrating it with ARS sugarcane production research at Canal Point, Florida. The ARS program at the SWAP site in Ft. Pierce is already closely linked to soil-water-plant research at Gainesville. We intend to support the Ft. Pierce program in 1986 with a post-doctoral scientist and technician to work on citrus problems relating to drainage, soil acidity, irrigation, and effect of rootstocks on citrus yield and quality.

CITRUS CANKER RESEARCH EFFORTS

Question: As you know, Mr. Secretary, Florida's citrus industry experienced a devastating 1984 and January of 1985. Medflys, killer freezes and the dreaded citrus canker have all taken their toll on the industry not just in terms of lost production and revenues but also psychologically. Many growers are beginning to feel like someone's trying to tell them something.

In the face of all this hardship and frustration, growers have taken some satisfaction and comfort knowing that the Federal Government has supported them in efforts to overcome at least those things that can be or potentially could be controlled. There's not much we can do to stop killer freezes like we've experienced so often in the recent past but we can do something about pest and disease threats that plague Florida's billion dollar citrus industry. That is why I was so concerned to note that you are suggesting that the Section 406, Tropical-Subtropical Agriculture Research Program be eliminated in fiscal year 1986. As you know, Mr. Secretary, this program has allowed the University of Florida to conduct some citrus canker research and given the current outbreak of the disease in

Florida, I was astounded to see that you are recommending its elimination. In addition, Mr. Secretary, you are aware that this program funds a variety of other important research in the tropical and subtropical areas of the U.S. Pacific and Caribbean Basins. These are unique growing areas that deserve this research initiative.

Mr. Secretary, citrus canker is unknown as to its origin or its control. What is known is that it does pose a real and immediate danger to the entire citrus industry in my State, or what's left of it after this last freeze. You'll recall that when canker struck Florida earlier this century, it took some 15 years to eradicate. Today, as it was then, the only way to get rid of it is to push and burn affected trees. We're not hearing very much about canker now because it's in its dormant stage but in the next month or so we could find out just how widespread it is.

One of the biggest problems we face in the fight against canker is our lack of information. We simply must learn more about it and how to control it. Accordingly, I'm having a very difficult time trying to understand why you are recommending elimination of this critical canker related research program. Perhaps you could give me your rationale.

Answer: Under funds appropriated to the Cooperative State Research Service the Special Research Grants program has included Tropical and Subtropical Research. In fiscal years 1984 and 1985 none of these funds were directed to citrus canker research in Florida. However, in fiscal year 1985 this research is supported in Florida at a level of $236,000 from Hatch Act and State funds.

Question: I would also like to know about the status of the emergency citrus canker research program that was included in the continuing resolution last fall. You will recall this program, as part of the Agricultural Research Service, was funded at $1 million for Fiscal Year 1985.

Answer: We were pleased to receive the emergency funds for citrus canker research and have implemented an aggressive program for its use. We established a $675,000 specific cooperative agreement with the University of Florida for research on the disease organism, the nature of spread, and methods of control. The balance of the funds were used for in-house programs at Orlando, Florida, and Beltsville, Maryland, both of which complement the University of Florida program. Additional ARS scientists have been assigned to these locations to work on plant germplasm for disease resistance and disinfestation of harvested citrus. It is hoped that the disease can be eradicated but if this is not the case, research by the University of Florida is planned in Argentina on ways to control the disease in commercial plantings. We know that the Florida strain is different from citrus canker found in other citrus production areas around the world.

Question: Will a similar sum be included in the Fiscal Year 1986 budget for this important program?

Answer: Yes, it will continue at the same level.

BIOTECHNOLOGY RESEARCH

Question: Mr. Secretary, biotechnology holds great promise for the future growth and productivity of agriculture. Would you tell me about USDA's program efforts in this area?

Answer: USDA is placing increased emphasis on use of biotechnology tools to solve agricultural and forestry problems and improve productivity. The techniques include plant cell and protoplast culture, plant regeneration, somatic hybridization, embryo transfer, recombinant DNA approaches, including gene identification, characterization, splicing, replication, regulation and transfer.

Question: Would you detail fiscal year 1985 USDA involvement in biotechnology and give me a breakdown regarding manpower and funding?

Answer: The information follows.

Biotechnology Research

	Fiscal Year 1985	
	$ in Millions	SY's
Agricultural Research Service	$26.4	180.0
Cooperative State Research Service	46.1	*
Forest Service	2.6	4.5
USDA Total	75.1	184.5

*Non-Federal, State Agricultural Experiment Stations (SAES) only, 340 SY's, 530 students, 598 staff.

Question: What is being proposed for 1986?

Answer: The information follows.

Biotechnology Research

	Fiscal Year 1986	
	$ in Millions	SY's
Agricultural Research Service	$26.9	180.0
Cooperative State Research Service	42.1	*
Forest Service	0.9	4.5
USDA Total	69.9	184.5

*Non-Federal, SAES only, 373 SY's, 583 students, 650 staff.

The fiscal year 1986 reduction in total funding results primarily from the proposal to terminate funding for the CSRS Special Research Grants program and the Forest Service Competitive Research Grants program.

Question: How much is going for biotechnology research in each fiscal year?

Answer: The information follows.

Biotechnology Research
($ in Millions)

	FY 1984	FY 1985	FY 1986
Agricultural Research Service	$15.4	$26.4	$26.9
Cooperative State Research Service	22.6	46.1	42.1
Forest Service	1.1	2.6	0.9
USDA Total	39.1	75.1	69.9

Question: Are any funds being expended for basic biotechnology risk assessment research?

Answer: The nature of risk assessment is inherent in basic research and is fundamentally a part of the scientific protocol at all times (i.e. what are the consequences of specific types of research?). For example, the incremental process of variety development and release involves an ongoing assessment. Another application of basic research to risk assessment is the development of new types of tools for risk assessment research; e.g. (1) research on methods to detect new agents of disease, such as various virus and virus-like particles in plants, plasmid carrying bacteria, and many other microorganisms; and (2) the development of molecular probes and other sensitive diagnostic tools for detecting specific genes and assessing their persistence and transfer in the environment.

The USDA and the National Association of State Universities and Land-Grant Colleges Division of Agriculture Committee on Biotechnology are in the process of formalizing a national program to assess the biological impact of the release of organisms containing recombinant DNA (r-DNA) for agricultural use. Although the program is not yet official policy, the specific details of the program are under review by the Federal agencies and the research universities. The National Biological Impact Assessment Program (NBIAP) would be organized using the existing nationwide agricultural research network. It would assure the safe release of r-DNA products into the environment through a three-level impact assessment plan using specified criteria and protocols. The program builds on the experience and success of the NIH-RAC and the associated Institutional Biosafety Committee (IBC) system. However, NBIAP would extend oversight of r-DNA research beyond present coverage and would include commercial and non-experimental release of r-DNA products. The proposed program is consistent with the Coordinated Framework for the Regulation of Biotechnology (Federal Register, December 31, 1984) and complements well the existing Federal regulatory authorities.

Question: Do you anticipate future risk assessment research support? How much?

Answer: Inasmuch as we are able to improve the support of biotechnology broadly in this nation, we will be able to improve our research base and thereby contribute to risk assessment research, e.g. such components as gene action and biological stress are a substantial part of risk assessment. The developing National Biological Impact Assessment Program will provide accurate and continuous assessment of the impact of genetically altered organisms produced by biotechnological research.

Question: Can you explain to me the process a company must go through to have an agriculture related biotechnology product approved for commercial distribution?

Answer: The approval processes recognize the need to provide a mechanism that is dependent in part on the nature of the product. Thus, although the general principle and route to follow are maintained, different steps will be taken, for example with an animal biologic to be used in a relatively closed system, than that involving a plant or microbial biologic that might involve several million acres. It is important also to note that when the proper steps are followed the ultimate "use" products, be they veterinary biologics, biological control biologics, higher plant biologics, etc., will not be treated differently whether genetically engineered or otherwise.

The agricultural research community has had a long and very successful history of releasing plants, microbials, and animals into the environment. The success of this process, especially in the last fifty years cannot be overemphasized. Last year alone, over 193 trillion corn plants were released into the agricultural environment without generation per se of untoward biological effects. The success of the process has been due to (1) the use of a high level of expertise based in the USDA and cooperating State agricultural experiment stations, (2) incremental development of releases, and (3) a continuous assessment process.

As described previously, the NASULGC Division of Agriculture Committee on Biotechnology and the USDA are formalizing the National Biological Impact Assessment Program (NBIAP) to expand upon experience cited above and to realize a safe, reliable assessment system that will take into account the criteria required for the approval process.

Consideration for approval of release on a commercial or non-experimental scale assumes that the product has satisfied previously the criteria set forth for laboratory research (presently the National Institute of Health (NIH) Recombinant DNA Advisory Committee (RAC) Guidelines) and for small scale, experimental field testing.

The following sequence is a process proposed for the commercial release of a biotechnological product.

1. Product release request, containing specified information, including results of use under laboratory and specialized containment conditions, prepared by applicant.
2. Release request submitted to appropriate local authority including approval by an expanded local institutional biosafety committee.

3. Release request submitted to the NBIAP Board for evaluation and recommendations to be referred through specific RACs and to other agencies as needed.
4. Applicant notified of NBIAP Board recommendation and appropriate agency decision if applicable.

Question: Is this process significantly different from the approval process a non-agriculture related product would have to navigate in a different agency?

Answer: No, it would not be significantly different. The exception is the non-agricultural products that will always be used in a contained manner. For example, in the case of medicine, clinical trials are like agriculture's field tests. In this case impact on the environment is not an issue.

Question: About how long does it take and how expensive is it for a company to bring a biotech product successfully through USDA's regulatory approval system?

Answer: To date, USDA has not dealt with the commercial release of a biotechnological product with the exception of veterinary biologics. The USDA Agriculture Research Recombinant DNA Committee (ARRC) has worked closely with the NIH RAC in agricultural matters and USDA is currently developing a process to handle commercial and non-experimental applications. Where the impact situation is well established, time and cost are expected to be minimal.

Question: How many manhours and dollars are being expended for biotechnology regulation and oversight by USDA?

Answer: The oversight of biotechnology is not separable from agricultural research and regulation. Rather, it is a normal part of the established process of assessment and management. The regulation of biotechnology is not yet consuming any significant USDA resources due to the few applications and inquiries received.

Question: Would you tell me about USDA's biotechnology regulatory coordination with other federal agencies?

Answer: USDA has collaborated with NIH, EPA, FDA and NSF on biotechnological issues related to agriculture. The twelve member Agriculture Recombinant DNA Research Committee (ARRC) includes representatives from USDA, NIH and NSF and has worked closely with the NIH RAC. Additionally, the USDA has a non-voting representative to the NIH RAC.

Question: What agencies do you regularly deal with in this regard and what products or circumstances most often lead to the necessity of cooperative working agreements?

Answer: The agencies primarily dealt with in a coordinated regulatory mode are NIH, EPA, and FDA. Areas which may overlap include animal biologics, some food additives, biological control agents, certain microbials, and environmental impacts resulting from the release of biological organisms.

Question: Do you feel there exists a need for more cooperation and coordination between the various agencies with regard to the regulation of biotechnology?

Answer: Yes, expanded cooperation and coordination would be beneficial.

Question: What unnecessary regulatory overlap currently exists in your opinion?

Answer: It is believed that existing legislation is sufficient if administered in the manner consistent with previously established USDA policy. There are areas of overlap between USDA and EPA in particular. There are differences of opinion in certain areas regarding the definition of pesticides, chemical substances, and genetic engineering as well as the scope and interpretation of Federal, Insecticide, Fungicide, and Rodenticide Act (FIFRA) and Toxic Substances Control Act (TSCA).

Question: Does the need exist in any situation for more clearly defined regulatory responsibilities among the various agencies?

Answer: The areas noted above will require clarification. This may come about as the National Biological Impact Assessment Program (NBIAP) and the OSTP Proposed Coordinated Framework for Regulation of Biotechnology (December 31, 1984, Federal Register Notice) develop. The OSTP framework and NBIAP will provide a mechanism and a supporting research base to accommodate the oversight demands brought about by the new biotechnologies.

Question: Do you endorse the recommendations of Cabinet Council's Working Group on Biotechnology regarding the proper regulatory framework?

Answer: USDA supports the Coordinated Framework for the Regulation of Biotechnology proposed by the Cabinet Council Working Group on Biotechnology in the December 31, 1984, Federal Register Notice. The proposed system could be strengthened by formally linking the Federal review system with the National Biological Impact Assessment Program for all issues pertaining to agriculture to assure that the best available scientific expertise and resources are accessed in the assessment of the biological impact of biotechnological release.

Question: Some questions have been raised regarding EPA's ability to enforce the current laws regarding biotechnology due to lack of resources and expertise. Do you believe USDA has the proper resources and expertise to adequately deal with existing regulatory requirements?

Answer: Basically the USDA has the resources and expertise. Through expertise available in the USDA and cooperating university scientists, the USDA will be equipped to deal efficiently with the products and processes of biotechnology. This is predicated on the development and implementation of NBIAP. NBIAP takes advantage of the State Agricultural Experiment Station System--the extant agricultural research network of the USDA and the nation. The past 75 years of strength and dependability speak to the success of the agricultural research community's assessment system, and this system will be formalized through the NBIAP.

Question: As a greater number of and more advanced biotechnology products and substances reach the commercial distribution point, will USDA be able to handle these new demands?

Answer: Following the successful model of the NIH Recombinant DNA Advisory Committee and supplementing it with the NBIAP, USDA will have adequate expertise to handle the demands. As described previously, the NBIAP offers a three-level assessment program using specified criteria and protocols to deal with the development, release and commercialization of biotechnological products in the most efficient and prudent manner. Much of the control is envisioned at the local institutional biosafety committee level as knowledge and expertise increase--similar to the early days of the NIH RAC and associated Guidelines for r-DNA research.

Question: Will the department be able to expeditiously move new products through the regulatory process?

Answer: Yes, USDA will be able to do this. The existing network of scientific resources and current regulations can provide necessary oversight.

QUESTIONS SUBMITTED BY SENATOR SASSER

CONSERVATION

Question: The Administration's budget requests for Fiscal Year 1986 will effectively gut our soil conservation programs. The most important impact of these cuts in Tennessee will be the reduced ability of the Soil Conservation Service to answer requests for technical assistance. Technical services will be reduced in Tennessee to approximately 25%-33% of the present level. Soil surveys will also be reduced to approximately 25% of the current level.

These figures spell disaster to a state like Tennessee which has severe erosion problems. Conservation efforts in our state have reduced annual erosion rates on cropland from 14.1 tons per acre annually to 10 tons per acre annually between 1977 and 1982. Despite these gains, we have got a long way to go as most experts suggest a loss rate near 5 tons per acre annually is acceptable.

Yet, the Administration comes in and suggests we turn back the clock and return to the days when we ignored soil erosion. You and I both know that our soil is our most precious natural resource. You as a farmer ought to know how critical the programs of the Soil Conservation Service are to the future of farming in this country. How can you in good conscience support a budget which is pushing us back to the days of the Dust Bowl?

Answer: The Administration has taken a hard look at identifying those functions performed by the SCS which we consider to be of the very highest priority and absolutely essential to the Federal role in supporting a cooperative conservation effort. We began by reviewing the original mission of the SCS as it was established by Public Law 46 in 1935. We considered current conservation needs and priorities as set forth in the National Conservation Program transmitted to Congress in 1982 in response to the requirements of the Soil and Water Resources Conservation Act of 1977 (RCA). Within the limited resources that were available, the Budget proposes a minimum level program which permits us to continue to provide Federal leadership for a national conservation program. On the basis that our most important resource is technical knowledge, we would still provide technical assistance, although at a reduced level, working with farmers and other land users through conservation districts to address high priority resource problems caused by excessive soil erosion and inefficiencies in the use of limited water supplies. The SCS role would emphasize conservation planning and technology transfer. Greater reliance would be placed on conservation districts, other State and local agencies, and the land users themselves to carry out actual on-the-ground application of conservation practices. SCS would continue to provide soil survey information to support conservation work, although we would have to postpone our goal for completing the nationwide soil survey in the next decade. SCS would also continue to test and develop plant materials for erosion control and other high priority conservation uses. These are the functions which we believe support the central mission of the SCS and could not be carried out effectively without Federal assistance.

Over the years, programs have been authorized for implementation by SCS to help prevent flooding in small watersheds; to address serious erosion problems in the Great Plains States; to improve economic opportunities in rural areas; to collect and analyze natural resource data; and to carry out long-term conservation planning and evaluation. These programs have made a valuable and lasting contribution to the significant progress that has been made over the past 50 years in maintaining the condition of our soil and water resources. However, in view of the serious national economic problems we are now facing, the 1986 budget proposes to discontinue funding for these programs.

FARM CREDIT SITUATION

Question: A recent survey done jointly by the Farm Journal and the Food and Agriculture Policy Research Institute examined the farm credit situation and came up with several "lessons" to avert further economic deterioration in the farm community. One such lesson stresses that the Administration's effort to make large cuts in farm spending is at odds with the nation's farm support needs at a time when farm financial stress is "severe and widespread."

How do you respond to this charge?

Answer: In the short-run we have tried to deal realistically with the farm credit problem through provisions for improved cooperation and monitoring of the farm credit situation, greater forebearance in servicing farm borrowers who are in trouble, and increased flexibility in the administration of FmHA's farm lending. We have also encouraged private lenders to use the option of writing down interest instead of principal to help borrowers qualify for the $600 million that is still available for FmHA guaranteed loans. To make it work we need the help of the states, local communities, and lending institutions. It should also be noted that between December 1984 and April 1985 it is estimated that the Commodity Credit Corporation will have provided over $12 billion in operating cash to farmers through loans and direct payments. This represents more than three-fourths of the expected total loans and payments to be made by CCC for fiscal year 1985.

Looking forward to the future and the long-run situation, however, the farm legislation that we are proposing is designed to improve the economic situation in the farm sector by helping the U.S. farmers compete on a more favorable basis in world markets. The Administration is committed to promoting open access to world markets for our exports and to provide for fair trading practices in the international arena. Not only will the farm legislation we are proposing lead to a more prosperous agriculture sector in the long-run, it will also help to reduce the Federal budget deficit; particularly in the FY 1987-1991 period. We believe it is imperative that the deficit be reduced because of its adverse impact on the agriculture sector and that USDA should make a contribution to that effort by reducing its spending.

DEBT RESTRUCTURING

Question: This same survey finds that farm credit market conditions are worsening. The authors stress that any combination of higher interest rates and lower government farm "safety net" would cause rapid deterioration as increased loan defaults drag lenders under. Given this forecast, how can you justify the virtual elimination of the farm "safety net" which you are proposing in the Administration's budget request and the Agricultural Adjustment Act of 1985?

Answer: We believe the critical lending problems we face this planting season are being addressed effectively by FmHA, the Farm Credit System, commercial banks, and other lenders. The debt restructuring initiatives announced by the President in September last year are now being implemented by FmHA and provide a tool to be used by private lenders to work out debt problems with guarantee assistance from FmHA.

The Agricultural Adjustment Act of 1985 will attempt to provide the long term solution to programs and policies which contributed to the current farm problems. Past policies produced interest rates below the rate of inflation and encouraged borrowers to expand debt because it could be repaid with less valuable dollars. High inflation and negative real interest rates masked the true earnings investment in agriculture. Further, subsidized farm lending is no solution to our current problems.

The administration's proposed Agricultural Adjustment Act of 1985 will result in a sounder, market-oriented, basis for capital investment in agriculture. Farm borrowers as well as farm lenders will benefit, in the long-run, from greater reliance on market forces in determining prices, income and repayment capacity, and less on government intervention and the leveraged borrowing of the 1970's.

INTEREST WRITE-DOWN

Question: During the farm credit debate, we heard arguments that our legislative efforts weren't necessary in light of the Administration's farm credit initiatives. Your announcement in early February that you were allowing banks to write down interest as well as principal to obtain loan guarantees was heralded as providing farmers enough assistance. Those of us who played a part in the recent farm credit filibuster disagreed with you, and I tell you why.

As I read your proposal, the guarantee rate to be made available under the interest write-down program is the same as the guarantee rate applied under the principal write-off option. As this works out, a bank is allowed to write-down the interest only if it is willing to live with a substantially lowered level of guarantee.

It was clear to me that few banks would take part in a program where the guarantee rate was as low as 75%, a very real possibility according to banking groups I have heard from. Since the level of exposure stays the same with either the interest or principal write down, you didn't offer farmers any new credit relief with the interest option did you?

Answer: You are correct in stating that the level of federal exposure in the FmHA guarantee remains the same under the interest or the principal write-down. Stated differently, the dollar amount of loan principal and interest repayment guaranteed by FmHA under the interest write-down option is substantially the same at any point over the life of the loan as if the loan had been adjusted by an up-front principal write-off of 10 percent. The percent guarantee varies. For example, for a $100,000 loan with a 10% write-off, a 90% guarantee results in federal exposure of $81,000. A similar exposure with equivalent interest write-down results in a 81% guarantee in the first year on an unadjusted debt balance of $100,000. The bank does not incur a lowered level of guarantee, since the dollar amount of federal exposure remains the same.

We believe the farmer will be assisted under the change to allow interest write-down since banks may be better able to absorb the necessary costs of debt resturcturing over the life of the loan, rather than an immediate charge-off on principal. Indeed, according to an American Bankers Association survey, the proportion of lenders interested in the debt adjustment program increases from half to over 80 percent with the change to allow for interest reductions rather than the immediate principal write-down.

ORIGINATION FEE

Question: Over the past three weeks, several of my colleagues and I have taken what we feel is necessary action to address this nation's farm credit crisis. The Administration has not been very cooperative in this effort. This lack of action on your part prompted our filibuster and subsequent farm credit legislation. Indeed, as I review many of your proposals for the upcoming year. I believe you are actually aggravating an already intolerable credit situation. Such is the case with the proposed 5% origination fee for FmHA loan guarantees contained in the Administration's budget requests.

As you know, the bulk of these loan guarantees are for one year operating loans. The one year term does not allow the farmer to amortize the 5% origination fee. Instead, he has to add this 5% on to an already burdensome interest rate. So in essence, you are increasing the interest rate for Farmers Home operating loan guarantees by 5%.

You yourself said in a recent issue of U.S. News and World Report that "There's no way a farmer can make money paying 15 1/2% interest." Yet, this origination fee of 5% will have the effect of imposing interest rates close to 15% on many Farmers Home loan guarantees. How are Farmers Home borrowers going to make any money carrying such an interest burden?

Answer: Although good data is not available, we believe that much of our guaranteed lending, whether or not it is categorized as a debt adjustment, is for re-financing existing debt. The loan terms for the refinancing are typically longer than for or direct annual operating loans. The one-time origination fee of 5% spread over operating terms of up to seven years, subject to extension to fifteen years, results in additional annual costs of less than one percentage point.

QUESTION SUBMITTED BY SENATOR DECONCINI

NAVEL ORANGE MARKETING ORDER

Question: I sent a letter to you on Friday, March 1 regarding the Navel Orange Marketing Order situation. You suspended the volume regulation under that marketing order in early February. Since that decision, it is clear that less fruit has reached the fresh market, farmers have generally lost income and consumer retail prices have generally remained the same or have increased. It would appear from this that the market has become disruptive. Therefore, are there any good reasons for continuing the suspension of volume regulations?

Answer: The decision of the Agricultural Marketing Service not to issue a prorate regulation for California-Arizona navel oranges for the week ending February 7, 1985, nor thereafter until further notice, was announced on January 29, 1985. This action was based on marketing conditions, including the current and prospective supply and demand conditions for California-Arizona navel oranges, the January freeze in Florida, and a Department of Agriculture (USDA) estimate that 1984-85 season average equivalent on-tree returns to producers for such oranges will be substantially above parity.

Since suspension of the regulations, prices have declined slightly apparently reflecting weather conditions, quality and condition problems.

Price and market information are being closely monitored. If it is determined that substantial changes have occurred, USDA will consider, consistent with the applicable statutory requirements, reinstating regulations. At this point in time, market conditions have not sufficiently established that the disorderly market conditions necessary to justify reinstating prorate are present.

(The letter referred to in Senator DeConcini's question follows:)

March 1, 1985

The Honorable John R. Block
Secretary
Department of Agriculture
Washington, D. C. 20250

Dear Mr. Secretary:

On February 4 the USDA announced the suspension of volume regulations for the Navel Orange Marketing Order No. 907. In the same announcement the USDA indicated that the order would be reinstated if there was evidence of market disruption. Not only is there substantial evidence of market disruption, but it is becoming increasingly clear that neither the consumer nor the grower is benefiting from the suspension. Rather, it is apparent that the only winner in this current fiasco is the middleman.

Since the order was suspended, the price to the consumer has remained stable while the prices paid to the grower have decreased. Clearly, the intent of the USDA suspension was not to benefit the middleman at the expense of consumer and growers, but that appears to be the result.

I urge you to consider reinstating the Navel Orange Marketing Order before market disruption worsens and the current situation deteriorates further.

Also, in the suspension order, USDA noted the freeze in Florida, as one of the principal reasons for lifting the volume regulations. Since the lions share of the Florida crop is for juice oranges, not eating oranges, while the California-Arizona crop is almost exclusively for eating, I cannot accept USDA's rationale. This, along with the market disruption, appears to this Senator to be substantial reason for lifting the suspension.

Sincerely,

Dennis DeConcini

DENNIS DeCONCINI
United States Senator

SUBCOMMITTEE RECESS

Senator COCHRAN. Mr. Secretary, we appreciate your appearance. We will now stand in recess until Thursday, March 7, in the same room, when the subcommittee will consider the budget requests for the Food and Nutrition Service and the Human Nutrition Information Service. We stand recessed until 10 o'clock Thursday morning.

[Whereupon, at 11:50 a.m., Tuesday, March 5, the subcommittee was recessed to reconvene at 10:30 a.m., Thursday, March 7.]

AGRICULTURE, RURAL DEVELOPMENT, AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 1986

THURSDAY, MARCH 7, 1985

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, DC.

The subcommittee met at 10:30 a.m., in room SD-124, Senate Dirksen Office Building, Hon. Thad Cochran (chairman) presiding.

Present: Senators Cochran, Burdick, and Bumpers.

DEPARTMENT OF AGRICULTURE

FOOD AND NUTRITION SERVICE

HUMAN NUTRITION INFORMATION SERVICE

STATEMENT OF MARY C. JARRATT, ASSISTANT SECRETARY, FOOD AND CONSUMER SERVICES

ACCOMPANIED BY:

- **ROBERT E. LEARD, ADMINISTRATOR, FOOD AND NUTRITION SERVICE**
- **ISABEL D. WOLF, ADMINISTRATOR, HUMAN NUTRITION INFORMATION SERVICE**
- **VIRGIL CONRAD, DEPUTY ADMINISTRATOR FOR FAMILY NUTRITION**
- **GEORGE E. BRALEY, DEPUTY ADMINISTRATOR FOR SPECIAL NUTRITION**
- **WILLIAM G. BOLING, BUDGET OFFICER, FOOD AND NUTRITION SERVICE**
- **ROBERT SHERMAN, DEPUTY BUDGET OFFICER, DEPARTMENT OF AGRICULTURE**

OPENING REMARKS

Senator COCHRAN. The subcommittee will please come to order. I apologize for being late in arriving. I had to be in two or three places at once this morning.

We continue our hearings on the request from the administration for funding that comes under the jurisdiction of our Subcommittee on Agriculture, Rural Development and Related Agencies. This morning we are hearing from witnesses who are testifying in support of the Budget request for the Food and Nutrition Service, and the Human Nutrition Information Service.

The Food and Nutrition Service, through State and local agencies, has a number of programs that provide food assistance to individuals. These programs are designed to meet family food needs, the food needs of individuals with special requirements, and the food needs of persons in certain institutional settings.

These programs are the Child Nutrition Programs, including School Lunch, School Breakfast, Child Care and Summer Food Programs; the Food Stamp Program; nutrition assistance to Puerto Rico; the Special Milk Program; special supplemental food programs, which include the Feeding Program for Women, Infants and Children; the Food Donation Program; and the Temporary Emergency Food Assistance Program.

Over 40 percent of the President's request in this subcommittee's bill is for nutrition programs. The administration has proposed legislation which would provide a savings of approximately $686 million in 1986 for the Child Nutrition Programs.

In this committee, we will monitor the activity of the authorizing committee. We trust that Congress will have an opportunity to consider the legislative proposals prior to the time that this subcommittee must act on its appropriations bill.

The Human Nutrition Information Service performs and sponsors research to improve professional knowledge and public understanding of food supplies, nutrition, and the adequacy of diets in the U.S. population.

I appreciate, very much, Mary Jarratt, Assistant Secretary for Food and Consumer Services, being here this morning. She is accompanied by others. I will ask you, Ms. Jarratt, to introduce those who are accompanying you. We appreciate your being here.

PREPARED STATEMENT

We have your prepared statements, for which we thank you. They will be made part of the record. We ask you now to proceed in any manner that you wish.

[The prepared statement of Ms. Jarratt follows:]

STATEMENT OF MARY C. JARRATT

I am pleased to have this opportunity to speak to you today on the 1986 budgets for the Human Nutrition Information Service and the Food and Nutrition Service.

With me today are Ms. Isabel Wolf, Administrator of the Human Nutrition Information Service, and Mr. Robert Leard, Administrator of the Food and Nutrition Service.

The work of the Human Nutrition Information Service is important because it enables the Secretary to monitor the effects of our agricultural economy on the nutritional well-being of the Nation and to take steps to see that research-based information on nutrition is conveyed to the public in a meaningful and responsible manner.

The HNIS budget request for fiscal year 1986 is for $13,416,000. This is an increase of $5,920,000 over the fiscal year 1985 appropriation. Most of the increased funds ($5,820,000) will be used to conduct the comprehensive, decennial Nationwide Food Consumption Survey—1987 (NFCS-87). The balance of the increase, $100,000, will be used for a pilot study on the selenium content of food.

The Food and Nutrition Service administers the Department's Food Assistance Programs. The budget request for these programs in 1986 is $17.9 billion. Key elements which affect this budget include:

A strengthening economy with an unemployment rate under 7 percent and a 4 percent rate of inflation; and

Protecting benefits for the needy while containing program costs.

Overall, this budget represents a reduction of $185 million below fiscal year 1985 and includes the following major changes:

Freeze the cost-of-living adjustment for subsidies in the Child Nutrition Programs;

Eliminate the Federal support in Child Nutrition Programs for meals for nonneedy children;

Mandate a Community Work Experience Program for food stamp recipients parallel to those of other Federal Welfare Programs; and

Establish a Food Stamp State Administrative Grant to replace current matching formulas.

These savings would be achieved with no impact on those households that, because of low income, require our help. This budget represents the continuing commitment of the Department of Agriculture to these programs and their recipients.

Ms. Wolf and Mr. Leard will provide more details on the budget. We will be glad to answer any questions the subcommittee might have.

INTRODUCTION OF ASSOCIATES

Ms. JARRATT. Senator Cochran, thank you so much. It is a pleasure to be here with you to discuss the programs for the Food and Consumer Services area. To my right is Isabel Wolf, the Administrator of the Human Nutrition Information Service. Mr. Bob Sherman, to her right, is from the Department's budget office.

Mr. Robert Leard, on my left, is the Administrator of the Food and Nutrition Service. Mr. George Braley, to his left, is the Deputy Administrator for the Special Nutrition Programs. Mr. Virgil Conrad is our Deputy Administrator for the food stamp area, and Mr. William Boling is the budget officer for the Food and Nutrition Service.

I would like to preface my comments, Senator Cochran and Senator Burdick, by saying that it has been a pleasure to work with you during the past 4 years. This is the last time that I will be appearing before you to discuss the food and consumer areas. I will be leaving the Department shortly.

Mr. Leard and Ms. Wolf will be there after me and are well prepared to discuss the workings of our programs this morning.

HUMAN NUTRITION INFORMATION SERVICE BUDGET REQUEST

First of all, I would say that the budget for the Human Nutrition Information Service is $13,416,000, an increase of more than $5 million from the 1985 budget. Most of the increase would be used to conduct the comprehensive Nationwide Food Consumption Survey. The balance of the increase, $100,000, would be used for the pilot study on the selenium content of food.

FOOD AND NUTRITION SERVICE BUDGET REQUEST

The Food and Nutrition Service, which administers the food assistance programs for low-income people, has a budget request in 1986 of $17.9 billion. Key elements which affect this request are the strengthening economy with an unemployment rate projected at under 7 percent and a 4.3-percent rate of inflation for food prices.

FNS PROPOSED SAVINGS

The targeting of benefits for the needy has been and will continue to be a major concern as we continue also to try to contain program costs. Overall, the FNS budget reflects a reduction of $185 million below the fiscal year 1985 level and includes several major changes which I would like to highlight.

A freeze is proposed for cost-of-living adjustments to subsidies in the child nutrition area. There is a proposal to eliminate Federal support in the Child Nutrition Programs for nonneedy children—that is, children who come from families that have incomes above 185 percent of poverty.

There is a mandate for participation in a Community Work Experience Program for food stamp recipients and for other recipients of Federal welfare benefits, and a proposal to provide the States a grant for Food Stamp Program administrative funding. Savings would be achieved with no impact on those households that, because of low income, require our help.

The budget represents the Department's continuing commitment to make the programs workable for our needy recipients.

I would like to ask Ms. Wolf to proceed with the specifics of the HNIS proposals.

PREPARED STATEMENT

Senator COCHRAN. We have your prepared statement, Ms. Wolf, which we will insert in the record at this point and ask you to summarize your comments as you see fit.

[The prepared statement of Ms. Wolf follows:]

STATEMENT OF ISABEL WOLF

I am Isabel Wolf, Administrator of the Human Nutrition Information Service (HNIS). I am pleased to be here today to discuss the HNIS budget request for Fiscal Year 1986.

Mission of the Human Nutrition Information Service

HNIS is composed of two operating units; the Nutrition Monitoring Division and the Nutrition Education Division. The mission of the Agency is to conduct and interpret applied research in human nutrition to improve professional and public understanding of the nutritive value of food and the nutritional adequacy of diets and food supplies, and to provide information needed by the American public to make informed food choices. Research in these areas is specifically mandated in the Food and Agriculture Act of 1977 and the Agriculture and Food Act of 1981.

Within the Department of Agriculture (USDA), our Agency has primary responsibility for the National Nutrition Monitoring System (NNMS) and nutrition guidance and education research. The continuation and expansion of HNIS research activities are essential to support the Department's commitment to the National Nutrition Monitoring System and to nutrition education research.

Fiscal Year 1986 Budget Request

The HNIS budget request for Fiscal Year 1986 is for $13,416,000. This is an increase of $5,920,000 over the Fiscal Year 1985 appropriation. Most of the increased funds ($5,877,000) will be used to conduct the comprehensive, decennial Nationwide Food Consumption Survey-1987 (NFCS-87). This survey was defined as an integral component of NNMS in the Joint Implementation Plan submitted to Congress in 1981 by USDA and the Department of Health and Human Services (DHHS). The balance of the increase, $100,000, will be used for a pilot study on the selenium content of food. These increases are partially offset by decreases for management savings.

Nationwide Food Consumption Survey-1987. NFCS-87 is a major component of carefully planned sequential and systematic monitoring efforts undertaken by USDA since 1981 to implement NNMS. We plan to contract in Fiscal Year 1986 for the survey data collection. Field work for NFCS-87 will start in April of 1987 and end in March of 1988.

NFCS-87 will include a basic sample of households at all income levels and a supplemental sample of low-income households at 130 percent of poverty or less. As in the last NFCS in 1977-78, information will be collected on household food use and food costs for a 1-week period and the food actually consumed by individual household members during a 3-day period. Socioeconomic information, such as income, education, employment, and participation in food assistance programs will be obtained. Also, individuals will be asked to evaluate their health status and household food managers will be asked to rate the adequacy of their food. The NFCS-87 sample will be designed to include the 1987 sample for the Continuing Survey of Food Intakes by Individuals (CSFII). CSFII, a year-by-year survey of groups of individuals, will begin field work in April 1985.

NFCS-87 will be similar to NFCS 77-78 except that parts of the interview process for the household phase will be computerized. We are field-testing procedures and equipment for this process this year. Since the last NFCS in 1977-78 we have conducted a number of methodological studies to find ways to improve our data collection procedures and overall efficiency in providing food consumption information. These studies have supplied us with new tools to better elicit food use information from respondents.

Selenium Study. Of the 1986 increase, $100,000 is for initiation of a study of the selenium content of foods and its distribution in the food supply. If, as recent research suggests, selenium in food is found to have an inhibiting effect on cancer, we will require a better understanding of the food sources of this food element. Currently, the National Nutrient Data Bank (NDB) does not have adequate data on selenium in foods. Data are notably difficult to obtain because the analytical methods are tedious, although reliable, and because there is a great deal of variability in selenium levels in most foods.

Selenium content of foods of plant origin is highly variable depending on soil conditions where they are grown. Content in foods of animal origin can vary markedly depending on feeding practices and locality. The study will be initiated to quantify these variables and enable the development of a reasonable approach to the estimation of the selenium content of foods and its distribution in the food supply. Plans for the study are being developed in close cooperation with the Nutrient Composition Laboratory of the Agricultural Research Service.

Ongoing Monitoring Activities

National Nutrition Monitoring System. The comprehensive decennial surveys such as NFCS-87 have provided the cornerstone of the Departments's nutrition monitoring efforts for several decades. USDA has undertaken several other major monitoring activities since 1981 to meet the objectives set forth in the Joint Implementation Plan and to provide information on food and nutrient consumption needed by the Federal Government and others. A brief description of those activities follows.

- Purposes and procedures of NFCS and DHHS's National Health and Nutrition Examination Survey were reviewed by a committee of statisticians and sampling experts, and their recommendations to promote comparability are being implemented.

- Dietary data users conferences were held in 1983 by the Food and Nutrition Board of the National Academy of Sciences (FNB/NAS) under a USDA/DHHS grant. Through these conferences and an FNB committee, priority uses of dietary data were identified and new and more effective means of obtaining needed data were recommended. The FNB report recommendations are being implemented.

- A USDA/DHHS Joint Nutrition Monitoring Evaluation Committee was convened to report to Congress on the nutritional status of the U.S. population and to make recommendations for improvement of NNMS. Their report is nearing completion and will be sent to Congress this year. The recommendations of this committee will be used by USDA and DHHS to extend their plans for implementing the NNMS beyond 1987.

- The risks associated with nutrient intakes that fall below the FNB/NAS Recommended Dietary Allowances are being studied by an FNB-appointed committee of experts under a USDA grant. This study, needed for proper interpretation of USDA/DHHS survey results, will be completed this year.

- Two major methodological studies were conducted (1) to develop procedures for collecting food intakes from individuals for up to 12 days spread over a year and (2) to test procedures with selected segments of the low-income population. These studies identified better procedures to be used in the Continuing Survey.

- Additional research in survey methodology to improve NNMS was conducted at eight universities with USDA funding, and results are being incorporated into HNIS survey procedures.

- Plans for the Continuing Survey of Food Intakes by

Individuals, to be initiated in April, 1985, were developed with input from other USDA agencies, other Departments, and the private sector.

Continuing Survey of Food Intakes by Individuals. The Continuing Survey is the first nationwide dietary survey to be conducted year-by-year in this country. It will greatly complement NFCS-87 and the following comprehensive decennial surveys. The objective of this survey is to measure the food and nutrient content of U.S. diets over time, signal changes taking place, and provide certain other information pertinent to evaluations of nutritional status. This survey will provide continuous data on the dietary adequacy of the general population and selected population subgroups, such as the low-income population, who may be at high nutritional risk.

The ability to observe trends and forecast potentional nutritional problems will help policymakers formulate sound policies and programs with respect to agriculture, food assistance, nutrition education, food fortification, and so forth. Continuous, up-to-date information on food consumption practices and dietary adequacy of the population allows us to measure nutrition related responses of the population to economic change, health promotions, and other factors affecting food intake.

The Continuing Survey, scheduled to start in April 1985, will survey a core monitoring group--a nationally representative sample of women at all income levels who are 19 through 50 years of age and all the children of those women who are 1 through 5 years of age. It will include also a nationally representative sample of women 19 through 50 years of age at incomes of 130 percent of poverty or less and all children of those women who are 1 through 5 years of age. We have already extended the contract to continue these two samples for the second year (April 1986-March 1987). At this time, we are cooperating with the Food and Nutrition Service, and plan to initiate late this year or early next year a 1-year survey of the low-income elderly population. In addition, we are also planning to initiate a survey of men 19-50 years of age at all income levels. This sample will be limited to one 24-hour recall.

We in the Department are quite excited by this new, major, innovative thrust to our monitoring efforts. The CSFII is responsive to one of the major recommendations of the President's Task Force on Food Assistance relative to steps that should be taken to improve information on the nutritional well-being of the American population. We are pleased that the Agency already had plans underway to achieve this recommendation.

National Nutrient Data Bank. The National Nutrient Data Bank, also a major monitoring function of the Agency, must be expanded continually to cover the ever increasing number of foods Americans consume and additional nutrients recognized to be of nutritional importance. HNIS has just recently released updates of Agriculture Handbook No. 8, "Composition of Foods," for two additional groups of foods: Vegetables and Vegetable Products and Nut and Seed Products. Updates of at least three additional groups of foods are planned during this fiscal year. The information on the nutritive value of foods is a valuable national resource for researchers and educators concerned with food and nutrition, as well as for national and international food and nutrition planning.

The NDB is an essential component of the National Nutrition Monitoring System. Without data from the Bank, diets reported in the CSFII and NFCS-87 could not be appraised for their nutrient content and dietary guidance to help improve the nutritional quality of diets could not be developed. Surveys and controlled nutrition studies in USDA, DHHS, and throughout the country, as well as in other parts of the world, count on HNIS's National Nutrient Data Bank as a primary source of data on the nutrient content of food. Growth of the Nutrient Data Bank in the past several years has enabled us to expand the number of food components for which intakes are appraised from the 14 in the 1977-78 NFCS to 28 in the 1985 Continuing Survey and NFCS-87. Among the food components added are some of special public health concern--dietary fiber, sodium, zinc, cholesterol, and fatty acids.

Ongoing Nutrition Education Research Activities

HNIS develops and evaluates food and nutrition materials and techniques for increasing nutrition knowledge of professionals and consumers and improving food selection behavior. The Agency staff conducts and interprets food and nutrition research to solve practical nutrition problems faced by Government policymakers, educators, health professionals, and consumers.

Two major ongoing projects are the annual estimation of the nutrient content of the national food supply and the maintenance and monthly costing of the USDA family food plans at four cost levels. The least costly of these food plans, the thrifty food plan, is the legal standard for benefits in the Food Stamp Program. The food plans and their costs are dependent on the data for households and individuals collected in the decennial surveys.

The national survey data are also used to identify areas of need for food guidance and to design practical guidance materials to meet the special needs of target populations. The surveys help identify target populations, nutritional objectives, and standards for food assistance programs. Plans for analysis of data from the Continuing Survey for these and other purposes are underway.

Of special interest to nutrition educators, food producers and processors, and others is the revision of the Dietary Guidelines for Americans based on recommendations of a Dietary Guidelines Advisory

Committee of nine food and nutrition experts. This Committee has just completed its 2-year review of the current guidelines, which were published jointly by USDA and DHHS in 1980. These guidelines suggest that Americans get a varied diet, maintain reasonable weight, avoid too much fat, saturated fat, cholesterol, sodium and sugars, eat foods with adequate starch and fiber, and if they drink, do so in moderation.

These guidelines form the basis of dietary guidance policy in USDA and DHHS. Our agency has primary responsibility for support of the Advisory Committee, and publication of its report. We then coordinate the preparation of the bulletin presenting the revised guidelines.

Our Agency develops and evaluates materials and techniques for communicating nutrition information to target groups. One group under study is persons with low literacy skills. Materials and techniques for a more general audience will be evaluated in a followup survey of the women of 19-50 years who have finished their participation in the Continuing Survey. Comparable groups of women will receive different types of educational materials and their knowledge and behavior change will be measured. A bulletin that interprets the dietary guidelines and a report from a nutrient analysis of the respondent's diet will be evaluated. As computers become more available and easy to use, the nutrient analysis of diets is being used by Extension Agents and others as a tool for nutrition education.

In summary, HNIS staff monitors the nutrient content of foods and the nutritional adequacy of the food supply and diets of households and individuals. They conduct research for the development of materials and techniques for helping Americans improve their diets. The Department views these activities as basic to its mission. It sees the conduct of NFCS-87 as essential to both monitoring and education efforts.

Mr. Chairman, I will be happy to answer any questions you or other committee members may have.

STATEMENT OF ISABEL WOLF

Ms. WOLF. I am Isabel Wolf, Administrator of USDA's Human Nutrition Information Service. I am accompanied today by Dr. Robert Rizek, director of our Human Nutrition Monitoring Division.

Our agency basically conducts nutritional research and disseminates information. We have two operating units, the Nutrition Monitoring Division and the Nutrition Education Division. These units maintain the national nutrient data bank and the Nationwide Food Consumption Survey, the Department of Agriculture's part of the National Nutrition Monitoring System.

NATIONAL FOOD CONSUMPTION SURVEYS

As Ms. Jarratt stated, the fiscal year 1986 budget request is for $13.4 million, an increase of $5.9 million, or about 80 percent over the 1985 appropriation. Almost all of this increase will be used to conduct the comprehensive, decennial Nationwide Food Consumption Survey. This survey is an integral component of the National Nutrition Monitoring System.

The monitoring system is a joint effort of the Department of Agriculture and the Department of Health and Human Services. The results of this Nationwide Food Consumption Survey are used as a basis for the nutrition information and education programs distributed by the Department.

SELENIUM RESEARCH

The balance of the requested increase will be used for a pilot study of the selenium content of foods. Recent research indicates that selenium may have an inhibiting effect on some types of cancer, and we have very limited knowledge of the selenium content of various foods.

ONGOING ACTIVITIES

Our ongoing Nutrition Monitoring Program includes the continuing survey of the food intakes of individuals. Data collection for this survey will begin in April 1985. This new type of survey is planned to provide nutrient information for a core monitoring group of women, aged 19 to 50, and their children.

Plans for the 1985 continuing survey include collection of information on other groups at nutritional risks, such as low income individuals, the elderly, and men. Through this survey, we will collect the types of information concerning the nutritional status of individuals which were suggested by the President's task force on food assistance.

We are working closely with the Department of Health and Human Services in the design of the survey and the data bases for its analysis to ensure greatest compatability within the National Health and Nutrition Examination Survey, which is the other part of the National Nutrition Monitoring System.

Other ongoing nutrition education efforts include maintenance of the USDA's family food plan and the thrifty food plan, which are used to set benefits for the Food Stamp Program.

We also provide support for the dietary guidelines advisory committee, which is just completing its 2-year review of the initial guidelines published in 1980 by the Departments of Agriculture and Health and Human Services.

We will be publishing the committee's report to the Secretaries of the two departments and will coordinate the publication of the revised guidelines with the Department of Health and Human Services.

We also have underway plans for a series of mini-bulletins to help the public put these guidelines into practice. That concludes my summary.

Senator COCHRAN. Thank you, Ms. Wolf.

Ms. JARRATT. Would you like Mr. Leard to proceed with his testimony and then take questions from both agencies?

PREPARED STATEMENT

Senator COCHRAN. Yes, why don't we do it that way. Mr. Leard, we have your prepared statement, which we will insert in the record at this point.

[The statement of Mr. Leard follows:]

STATEMENT OF ROBERT E. LEARD

Mr. Chairman, members of the Committee, I want to thank you for the opportunity to discuss the Fiscal Year 1986 Budget for the Food and Nutrition Service.

This budget, as the members of this committee know, funds:

- Reimbursements for meals and milk served to children by schools and institutions,
- The costs of food stamps issued to participating households,
- The costs of Nutrition Assistance in Puerto Rico,
- The costs of vouchers and commodities issued to pregnant and post-partum women, infants and children in need of food assistance,
- The costs of commodity assistance to Indians, schools, institutions and the elderly,
- Cash assistance to States for their administration of the Programs and Federal administrative costs including the costs of distributing commodities donated by other Agencies of the Department.

For Fiscal Year 1986, the FNS request totals $17.9 billion. This is a reduction of about $185 million below the current estimate for Fiscal Year 1985 and reflects our continuing efforts to target the aid to the needy and contain the costs of these programs.

CHILD NUTRITION PROGRAMS

For Fiscal Year 1986, we are requesting an appropriation of $3.4 billion. This compares to the Fiscal Year 1985 appropriation of $3.8 billion and a projected cost under current law of $4.1 billion. In both Fiscal Years 1985 and 1986, it is estimated that the Child Nutrition Programs will receive $350.9 million in commodities which are purchased under the authority of Section 32. In Fiscal Year 1986, we expect nominal increases in the number of free and reduced price meals.

The $3.4 billion budget request is approximately $686 million less than would be required under current law and reflects the following legislative proposals:

- The elimination of the Fiscal Year 1986 cost of living increases which will affect all statutory rates of reimbursement. We expect schools and institutions will adjust to this change through improved management. This proposal will save about $38 million in Fiscal Year 1986.

- The elimination of assistance for all meals served to children from families with incomes above 185 percent of the poverty line. This proposal will save about $648 million in Fiscal Year 1986.

  To make this proposal effective in family day care homes, a test of family income would be reintroduced to limit payments to reimbursement for meals served to children from families with incomes below 185 percent of poverty. This "means test" would become effective on October 1. Under the present law, any child enrolled in an eligible family day care home receives the Federal subsidy regardless of family income. We estimate that 65 percent of family day care home recipients come from families with incomes above 185 percent of poverty.

SPECIAL MILK PROGRAM

No significant changes are anticipated in the Special Milk Program. The 1986 request of $11.5 million, together with prior year unobligated balances, is expected to fund the program at the current level. Legislation is proposed to freeze the reimbursement rate for milk served to children from non-needy families. No legislative changes are proposed which would affect payment for milk served to needy children.

SPECIAL SUPPLEMENTAL FOOD PROGRAM AND COMMODITY SUPPLEMENTAL FOOD PROGRAM

The proposed 1986 program level for these programs will continue to support the 1985 participation. In both programs, overall funding will increase to account for projected food price inflation.

For the WIC Program, $1.48 billion is requested for 1986 to support an average of about 3 million participants. This compares to a program level of $1.44 billion for Fiscal Year 1985 which is expected to stabilize this program at about 3 million participants by year-end. It is anticipated that the average monthly cost per participant will rise from $39 in 1985 to $41 in 1986.

For the Commodity Supplemental Food Program, the $34.1 million requested for 1986, together with prior year commodity inventory will continue to support the 1985 average participation of about 148,000. Funds have not been requested for the Elderly Pilot projects operating in New Orleans, Louisiana, Polk County, Iowa, and Detroit, Michigan, because the Department of Health and Human Services, which administers all other nutrition programs for the elderly, will assume responsibility for these pilot projects.

FOOD STAMP PROGRAM

For Fiscal Year 1986, an appropriation of $11.9 billion is requested. This estimate is based on an unemployment rate slightly below 7 percent and average monthly participation of 20.1 million. This compares to an average unemployment rate of 7.1 percent in Fiscal Year 1985 and average participation of 20.2 million.

The 1986 budget estimate is affected by the following legislative proposals:

- The initiation of the Community Work Experience Program for work-eligible participants with a net savings of $16 million;

- A grant to States for the cost of administering the Food Stamp Program to replace the current matching formulas and to improve State flexibility. The proposal would allow States to transfer up to 10 percent of the funds among this and similarly constituted grants proposed for AFDC and Medicare. This grant would be at the 1985 level of Federal administrative payments. We expect that States would absorb this change by improved management. Subsequent annual adjustments to this grant would be indexed to the Gross National Product deflator. This proposal would save $40.3 million in 1986 and;

- Proposed changes in the Aid to Families with Dependent Children Program which would increase food stamp costs by $36 million.

NUTRITION ASSISTANCE FOR PUERTO RICO

An appropriation of $825 million is proposed. This is the level authorized for the past 2 years.

FOOD DONATIONS

This requested appropriation would support the Needy Family Program and the Nutrition Program for the Elderly.

The Needy Family Program request is for $53.8 million in Fiscal Year 1986 compared to a program level of $52.8 million in Fiscal Year 1985. This will enable the Agency to maintain support for 134,000 Indian participants in 1985 and in 1986.

In Fiscal Year 1986, the program level for the Nutrition Program for the Elderly is proposed to be held at the 1985 authorized ceiling of $120.8 million. This is in accordance with government-wide measures to freeze spending. The per-meal reimbursement rate will be adjusted to keep the program level within the authorized ceiling.

Temporary Emergency Food Assistance Program. In Fiscal Years 1984 and 1985, the Department provided $50 million for intrastate storage and distribution costs for donated commodities. Since the legislative authorization will expire at the end of Fiscal Year 1985, the Department has not requested funding for this activity in Fiscal Year 1986.

FOOD PROGRAM ADMINISTRATION

The Federal operating expenses of the Food and Nutrition Service are provided from the Food Program Administration account. Although the activities of the Agency are large in terms of the Department's Budget reviewed by this Committee, the administrative funds are relatively small.

The 1985 Budget for administering these programs proposed an appropriation of $83,187,000 which was provided by the Committee.

A pay increase in January of 1985 has increased costs by just over $2 million of which we are requesting $1 million in a supplemental appropriation.

In addition, the Deficit Reduction Act (DEFRA), required reductions in such costs as travel, publications and informational services. To meet the DEFRA targets, we are proposing reductions totaling $684,000 in this account.

The net result is that the Food and Nutrition Service is now proposing to fund 2222 staff years from this account; $3.2 million in travel and $410,000 in printing in 1985. These reductions have been made by not filling vacancies as they occur and shifting resources away from unnecessary regulation and lower priority activities.

We have placed more emphasis on better program reporting, monitoring financial information and collecting claims against States that are performing below standards established by law and regulation. We have reduced the debts owed to the Federal Government from $32.1 million in 1983 to $18.1 million in 1984. The past due debts have dropped by about 85 percent to about $818,000. I have also established a planning process that insures that these objectives are met.

One of our best uses of our limited resources in the Agency has been in the improvement of analysis and communications through Automated Data Processing. We are building a network of computer capability that has enabled the Food and Nutrition Service to live with the reduced staff and resources available.

For 1986, the budget proposes a further reduction of $5,122,000. Staff years will be reduced to 2154. We are making reductions in mid-level positions and will seek to make further reductions in administrative support activities.

The budget also proposes a 5 percent pay cut which will reduce Agency costs by $3,437,000.

Two program proposals we are recommending would assist us in carrying out our mission while reducing the staff resources of the Agency. One is the State Administrative Cost grant in food stamps and the second is a clarification of the responsibilities of FNS for direct administration of child nutrition programs in States which do not have laws prohibiting them from administering these programs. We estimate that about 50 staff years could be directed to other activities if these provisions were included in the subcommittee's recommendations.

We appreciate this opportunity to make our presentation and will try to answer any questions the Subcommittee may have.

Thank you.

STATEMENT OF ROBERT LEARD

Mr. LEARD. Mr. Chairman, members of the committee, I want to thank you for the opportunity to discuss our 1986 budget.

For fiscal year 1986, the Food and Nutrition Service will request a total of $17.9 billion. This is a reduction of about $185 million below the current estimate for fiscal year 1985. It reflects our continuing efforts to target aid to the needy and to contain the costs of these programs.

CHILD NUTRITION PROGRAMS

Turning to the Child Nutrition Programs, for fiscal year 1986 we are requesting a $3.4 billion funding level. This compares to fiscal year 1985 funding of $3.8 billion and a projected 1986 cost, under current law, of $4.1 billion.

In both fiscal years 1985 and 1986, it is estimated that the child nutrition programs will receive $350.9 million in commodities which are purchased under the authority of section 32. In fiscal year 1986, nominal increases in the numbers of meals served are projected.

The $3.4 billion budget request is approximately $686 million less than is required under current law and reflects the following legislative proposals:

First, the elimination of fiscal year 1986 cost of living increases as they affect all statutory rates of reimbursement. We expect that schools and institutions will adjust to this change by improved management. This proposal will save about $38 million in fiscal year 1986.

Second, the elimination of subsidies for all meals served to children from families with incomes above 185 percent of the poverty guideline. This proposal will save about $648 million in fiscal year 1986.

We wish to make this second proposal effective in family day-care homes by reintroducing a test of family income which limits reimbursement to meals served to children from families with incomes below 185 percent of the poverty guideline. This "means test" would become effective on October 1, 1985.

Under the present law, any child enrolled in an eligible family day-care home qualifies for the Federal subsidy, regardless of family income. We estimate that 65 percent of family day-care home recipients come from families with income above 185 percent of poverty or roughly $18,870, right now. We project that implementation of this "means test" will save about $160 million.

SPECIAL MILK PROGRAM

In the Special Milk Program, no significant changes are anticipated. The 1986 request of $11.5 million, together with prior year unobligated balances, is expected to fund the program at the current level.

SPECIAL SUPPLEMENTAL FOOD PROGRAMS

For the Special Supplemental Food and Commodity Supplemental Food Programs or WIC and CSFP, the proposed 1986 program levels will continue to support 1985 participation. In both programs, overall funding will increase to account for projected food price inflation.

For the WIC program, we are requesting about $1.5 billion to support an average of about 3 million participants. This compares to a program level of $1.44 billion for fiscal year 1985. This funding level is expected to support the program at about 3 million participants. It is anticipated that the average monthly cost per participant will rise from $39 in 1985 to $41 in 1986.

For the Commodity Supplemental Food Program, the $34.1 million requested for 1986, together with prior year commodity inventories, will continue to support the 1985 average participation of about 148,000. Funds have not been requested for the elderly pilot projects operating in New Orleans, LA, Polk County, IA, and Detroit, MI, because the Department of Health and Human Services, which administers all other nutrition programs for the elderly, will assume responsibility for these pilot projects.

FOOD STAMP PROGRAM

Turning to the Food Stamp Program, for fiscal year 1986, an appropriation of $11.9 billion is requested. This estimate is based on an unemployment rate of slightly below 7 percent and an average monthly participation of a little over 20 million. This compares to an average unemployment rate of 7.1 percent in fiscal year 1985 and an average participation of 20.2 million.

The 1986 budget estimate is affected by the following legislative proposals: First, initiation of Community Work Experience Programs for work-eligible participants, providing a net savings of $16 million.

Second, a grant to States for the cost of administering the Food Stamp Program is proposed to replace the current matching formulas and to improve State flexibility. The proposal would allow States to transfer some portion of the funds among this and similarly constituted grants proposed for Aid to Families with Dependent Children and Medicaid. The grant would be set at the projected 1985 level of Federal administrative payments. We expect that States would absorb the change through improved management. Subsequent annual adjustments to this grant would be indexed to the gross national product deflator. This proposal would save $40 million in 1986.

Finally, there are proposed changes in the AFDC Program which would affect the Food Stamp Program and increase its costs by $36 million.

NUTRITION ASSISTANCE FOR PUERTO RICO

An appropriation of $825 million is requested for nutrition assistance for Puerto Rico. This is the same level that has been authorized since fiscal year 1983.

FOOD DONATION PROGRAMS

Turning to the Food Donation Programs, this appropriation request would support the Needy Family Program and the Nutrition Program for the Elderly.

The Needy Family Program request is for $53.8 million in fiscal year 1986, compared to a program level of $52.8 million in fiscal year 1985. This will enable the agency to maintain support for 134,000 Indian participants in 1985 and in 1986.

In 1986, the program level for the Nutrition Program for the Elderly is proposed to be maintained at the 1985 authorized ceiling of $120.8 million. This would be in accordance with the Governmentwide measures to freeze spending. The per-meal reimbursement rate will be adjusted to keep the program level within the authorized ceiling.

TEMPORARY EMERGENCY FOOD ASSISTANCE PROGRAM

The Department provided $50 million for intrastate storage and distribution costs to the Temporary Emergency Food Assistance Program in fiscal years 1984 and 1985. Since the legislative authorization for this program will expire at the end of fiscal year 1985, the Department is not requesting funds in fiscal year 1986.

FOOD PROGRAM ADMINISTRATION

Congress appropriated $83 million in fiscal year 1985 for the Food Program Administration account. A pay increase in January 1985 has increased costs by just over $2 million, of which we are requesting $1 million in a supplemental appropriation.

In addition, the Deficit Reduction Act of 1984 required reductions in such costs as travel, publications and consulting, and information services. We have provided rescission proposals for these reductions. The net result is that the Food and Nutrition Service is now proposing to fund 2,222 staff-years from this account, $3.2 million in travel, and $410,000 in printing in 1985.

These reductions have been made by not filling vacancies and by shifting resources away from unnecessary regulation and lower priority activities. We have done this by placing more emphasis on better program reporting, better monitoring of financial information, and collecting claims against States that are performing below standards established by law and regulation.

We have reduced the debts owed the Federal Government from $32 million in 1983 to $18 million in 1984. The past-due debts have dropped by about 85 percent to about $818,000. We have also instituted a new planning process that shows that our long-range objectives are being accomplished.

We have also instituted an automation program which we feel will help us manage our programs better.

The 1986 budget proposes a reduction from the fiscal year 1985 level of a little over $5 million for food program administration. Staff-years will be reduced to 2,154. We are making reductions in midlevel positions and will seek to make further reductions in administrative activities.

The budget also proposes a 5-percent pay cut which will reduce agency costs by $3.4 million.

We appreciate this opportunity to make our presentation. We will try to answer any questions you have. Thank you.

Senator COCHRAN. Thank you, Mr. Leard.

FOOD STAMPS—COMMUNITY MENTAL HEALTH CENTERS

Ms. Jarratt, we have been exchanging correspondence to try to work out problems that exist as a result of language in a continuing resolution that was approved last year. One relates to the Food Stamp Program and the provision we included to allow food stamps to be redeemed by alcoholic and drug rehabilitation programs at publicly operated community health centers.

Our intent, which was expressed at that time, was that this was a change in the law. We understand, however, that States have been notified that the authorization has expired. They no longer can redeem food stamps for the use of these centers.

We have exchanged some correspondence on this and I understand that the decision is being reconsidered. What is the current status on that?

Ms. JARRATT. Senator Cochran, the Department held the same interpretation of that language as you did. We had regulations pending to implement the position as you described it in the letter you directed to us last fall.

We have also had several discussions with OMB on this. Their reading of the language was not in agreement with the way the Department read it. We forwarded to your office, several months ago I believe, the proposed schedule for the phaseout of the participation of those centers.

I also, several weeks ago, saw the letter you wrote to Secretary Block, asking that that decision be delayed for a period of time. I felt that that was being concurred with. The letter was being drafted. I was informed last night as I was preparing for this testimony that indeed it was too late. The earlier schedule had already been adhered to.

I regret that you weren't informed prior to today. I found out yesterday myself. I regret the inconvenience that these needy households are experiencing.

Senator COCHRAN. I really feel that it is unfortunate to see the dilemma in which that decision is going to put a lot of these publicly operated facilities. I am distressed about it. I presume that we will try to write it so that even those people down there in high places in the

Department can understand what we are saying the law ought to be, and what the intent of Congress is in the obligation of those funds and the operation of that program.

FISCAL YEAR 1985 ALLOCATION OF WIC FUNDS

One other issue that has been concerning us is the allocation of WIC funds. The continuing resolution, under which the Department is now operating, calls for WIC funds to be allocated to the States at a rate of $1.5 billion. A provision in the resolution specifies the allocation rate. State WIC agencies began planning their programs based on the calculation of their share of that funding level.

Now, it appears as though the $1.5 billion will not be spent, leaving State agencies with the dilemma of dropping people from the rolls, and then determining whether to add them back during the next fiscal year.

The administration is not winning many points out there for the roller coaster effect that this might have. What is the status of that? Are the funds being allocated in a way that will assure that that funding level will be utilized? Is this a back door rescission or deferral? What is going on?

Ms. JARRATT. Mr. Chairman, it isn't a back door rescission or deferral. Frankly, the partial year funding for the Department is a bit difficult to deal with. I don't think there is any intent on the part of the administration to befuddle WIC directors. We read the language as requiring us to spend at the $1.5 billion rate from October 1, 1984, through August 1, 1985.

The administration made a decision not to request the full $1.5 billion that was authorized, because we would like to stabilize participation in the program at about 3 million people per month.

The question of how much money is allocated each quarter is an issue that is still being discussed within the administration, and I defer to Mr. Leard to give you the latest on that.

Mr. LEARD. Mr. Chairman, the latest figures indicate that we are providing assistance to about 3 million participants, actually 3.05 to 3.07. With the money that we have had appropriated, the $1,254,288,000, and with the $169,295,000 made available to us in the President's budget, and the $20 million in 1984 funds available to the States in 1985, we feel that we have sufficient money to stabilize the caseload and to enter fiscal year 1986 at the 3-million level, which is where we would like to see the caseload stabilized.

We agree that we don't want WIC participation to roller coaster, which has been the case many times in the past. The administration is attempting to avoid this situation. We don't feel that the States will have to reduce participation if they are judicious in their spending.

SCHOOL LUNCH PROGRAM

Senator COCHRAN. In the School Lunch Program, I am concerned that the legislation that you are proposing may result in substantial participation loss in the program around the country.

I wonder whether or not you have had an opportunity to conduct some kind of analysis to project the impact of price changes for lunches, not just for those who are being served free lunches, but those who would have to pay full cost for lunches and all the rest of the programs?

We are told by lunch program administrators that this change would be devastating. I don't know whether it would be or not, but that is what they tell me. I am asking you: What would be the impact of the changes that you are recommending?

Ms. JARRATT. Senator, we cannot give you a definitive, exact answer to that, any more than the people who are opposing it can give you a definitive answer to the school or child dropout issue.

I can tell you that of the total Federal subsidy of the School Lunch Program, 85 percent of it does provide subsidies to free and reduced-price meals. So my belief is that the children receiving reduced-price and free meals help support the infrastructure of the program more than the paying child. Last year, the average price of a school lunch to the paying child was 82 cents. We are proposing to eliminate about 25 cents of the existing subsidy. We will be asking households with an income above 185 percent of poverty to pay that 25 cents per meal, which is $41 a year per child.

It is our belief that the balanced meal for $1.07, on nationwide average, is still a very good buy for a nutritious meal, and far superior to most alternatives that most school districts would turn to. I do believe that a community making the decision to turn its back on the few children in the district who would lose benefits must carry some degree of conscience for this action. It cannot all rest at the Federal level.

Bonus commodities would continue to be provided for all meals, which average 10 cents a meal. So, it is really 35 cents that we are providing right now for meals served to nonneedy children. As long as the Department has the inventory of commodities, we have no intention of eliminating the bonus commodities from this program.

SCHOOL LUNCH PROGRAM PARTICIPATION

With regard to specifics on how the dropouts were projected in 1981 in a similar legislative proposal and what actually happened, I will defer to Mr. Braley, who will give you the rundown of what actually occurred.

Mr. BRALEY. Mr. Chairman, when subsidies were reduced for meals to higher income children in 1981, we had an initial dropout, or decrease in participation, much of which has since been restored. If our proposal were implemented, there would probably be some children who, when they and their parents are faced with higher prices, would decide to leave the program.

Our experience has been that quite a few of those children, as they look at the alternatives and their costs, return to the program. The more difficult thing to project is whether schools would leave the program. I think an example that we have developed sheds some light on that.

Under the proposal that is being forwarded, a school that serves 80 percent of its meals to higher income children would still receive about 65 percent of the current support through the form of bonus commodities and reimbursements for free and reduced-price meals.

We don't believe that that many schools would leave the program over the subsidy reduction that has been proposed.

REGIONAL OFFICE-ADMINISTERED CHILD NUTRITION PROGRAMS

Senator COCHRAN. There was some testimony about pilot programs and special programs operated by the Federal Government in some States, including an elderly program. Aren't there also some child nutrition programs operated by the Federal Government which are proposed to be ended unless State laws prohibit the State from operating the program? What are the proposals in this area? Is this the same program?

Mr. LEARD. Mr. Chairman, these are what we call regional office-administered programs or ROAP. They fall into three categories: summer feeding, child care, and private schools. There are basically a dozen States which either do not operate the programs because of specific State laws or because they have chosen not to operate them. FNS operates these programs where the State does not.

This is a drain on the Agency's manpower and dollars. We believe that these programs could be more efficiently operated by the States. In some cases we have gotten the States to accept them back of their own volition.

For example, Hawaii has recently said they would take them back. Only a few of the States claim it is their State laws that prevent them, the rest just don't want to and feel it would be a drain on their economy. We believe the States should administer these programs.

Senator COCHRAN. What States? You say 12 States?

Mr. LEARD. It varies. I can give you an example. In New York, for instance, we operate the child care and summer feeding programs. They are very large programs which the State simply does not want to operate. We have a special office in New York City with upward of 30 people who do nothing but operate these programs.

Senator COCHRAN. And they work directly for the Food and Nutrition Service?

Mr. LEARD. Yes, sir; we fund all these people, and we actually administer these programs. Every summer for instance, we bring on a lot of summer help. We get college students, part-time, in the summer, who help to monitor these programs. If you don't monitor the programs closely, you can have problems with a little waste in them.

There are certain States in the Midwest that are ROAP. Nebraska is one. Colorado and Virginia have some ROAP programs. California and several States in the South have some programs which FNS operates directly.

Senator COCHRAN. Do you have any in Mississippi?

Mr. LEARD. I do not believe so, sir.

Senator COCHRAN. I have never heard of any down there.

Ms. JARRATT. We believe, Senator, that if the Federal Government is providing benefits and part of the administrative money for these programs, and if a State wants the benefits for its citizens, that State should assume the responsibility for administration.

Our philosophy has been to give as much responsibility to State administrators as possible. I do think that Federal activity should be confined to working with the State rather than delivering a program in the community.

Senator COCHRAN. When did that program start and under what authority did it begin?

Mr. LEARD. As the various child nutrition programs were started, some States refused to assume initial responsibility for administering them. Some of those States which did assume administration have dropped out of the program for one reason or another and the Agency has assumed those duties in order to maintain a national program. The whole effort has evolved through the years.

Senator COCHRAN. Under what authority are these programs operated? Is it legislatively mandated or is there just some language in an appropriations bill?

Mr. LEARD. I believe there is legislation that requires us to operate a national program. Therefore, when the States don't operate it, we are required to do so.

Senator COCHRAN. Are you proposing legislative changes in that authority?

Mr. LEARD. Yes, sir.

Senator COCHRAN. What is the basic law that you are suggesting be changed?

Mr. LEARD. The National School Lunch Act and the Child Nutrition Act, sir.

Senator COCHRAN. We would have to change both of them? There is a school lunch law, right?

Mr. LEARD. Right.

Senator COCHRAN. Is it that one?

Mr. LEARD. That is only one of the laws, sir. There is the Child Nutrition Act which has other programs that come under its aegis.

ELDERLY FEEDING PILOT PROJECTS

Senator COCHRAN. What about these three pilot programs for the elderly in New Orleans, Michigan, and Iowa? Are you recommending that those be dropped?

Mr. LEARD. No, sir; we are recommending they be transferred to the Department of Health and Human Services. This was originally a temporary pilot program, and it has been going on now for more than 2 years.

We believe that these programs would be more logically administered under the Department of Health and Human Services. There they would be funded under the umbrella of some other similar programs.

HUMAN NUTRITION INFORMATION

Senator COCHRAN. In that connection, there are some duplications, are there not, with HHS in the Nutrition Information Service? I know last year we expressed some concern that nutritional guidance was being received by the public from several different agencies, some within the Department of Health and Human Services, some from agencies within the Department of Agriculture.

Is there any way to coordinate this? We discussed this a little bit last year. I was just wondering what the current situation is. It seems a lot of people are doing the same thing.

Ms. JARRATT. I think the concern, if I remember correctly, that was expressed last year, was conflicting information coming from the two departments. I think that with the work of the Dietary Guidelines Advisory Committee, including their review of that publication—which both USDA and DHHS see as serving as the basis for nutrition guidance that will emanate from both departments—and the joint departmental plans to issue a revised publication, indicate that we have made some progress in dealing with the problem that existed.

The Department of Agriculture also has been invited to participate with the National Institutes of Health's National Heart, Lung, and Blood Institute, in the formation of a new nutrition education campaign that they are planning.

We have had some experience this year in working with the National Cancer Institute on the campaign that they have for the public. They were very, very pleased to receive assistance from us. They did not know that we had a staff of individuals who are skilled and experienced in the whole matter of dietary guidance for the public and have written to us, thanking us for the assistance that we gave them in that effort.

COORDINATION OF HUMAN NUTRITION RESEARCH

Senator Cochran, I would say that, generally, the mission of the Department of Agriculture is nutrition research for a healthy public. The work that is done in the ARS labs and the interpretation of the research that Ms. Wolf's agency does is used in modeling the food packages for the low-income assistance programs. It is used in disseminating information to the public about what one should do if you are healthy and trying to maintain weight and so forth.

HHS research is largely clinical—diet and disease linked—information which is very critical, too. Of course, some of our research feeds theirs, and some of theirs feeds ours. I don't think it is very important where the research is done, but I do think it is very important that both types of research are maintained. I believe we have made some considerable strides in coordinating the activities of both departments.

For example, we are developing a similar data base for the health examination survey that HHS does and the food consumption survey that we do. Believe it or not, the bureaucracies are still rather cumbersome, but I do believe that there is more linkage now between the two departments in this area than there ever has been since I have been working in Agriculture. I am very pleased at the progress.

Senator COCHRAN. Thank you very much.

Senator Burdick.

Senator BURDICK. Thank you, Mr. Chairman.

Ms. Jarratt, you stated a minute ago, that you are leaving the job. I have just come on the subcommittee. I hope there is no connection? [Laughter.]

Ms. JARRATT. There isn't, Senator.

SCHOOL LUNCH PROGRAM—LEGISLATIVE PROPOSALS

Senator BURDICK. I have a difficult problem here with school lunch. This is the way it looks in North Dakota: Elimination of section 4 funding would result in a $10 million cut, looking at North Dakota alone. The reason is that only 27 percent of the meals served in my State are to low- and moderate-income children.

Thus, cuts of the magnitude requested by the administration would virtually destroy the School Lunch Program in my State because the cost of serving only 27 percent is very high. Most school systems would be forced to shut down their programs. I expect that this is true of other States, as well.

Is it the administration's goal to eliminate this school funding? What is the situation?

Ms. JARRATT. Senator, I think perhaps we have a philosophical disagreement. The administration does not believe that the dropout projections will be as dire as have been forecast. I think that there may be some schools in the more affluent areas that serve food that perhaps will drop the program.

But the point is that for those lower income children, we are not taking the subsidy away. Budget reduction in this area, where the needs of vulnerable populations are concerned, is very difficult to do.

We feel it is more equitable to propose a reduction or elimination of the subsidy for the nonneedy than it is to take benefit reductions from people who have much lower incomes. So I don't think we can agree that the figures that you cite are exactly correct or the findings that I would cite are exactly what would happen. We simply have no way to make exact calculations. We just don't believe that communities will turn their back on generously funded benefits for low- and middle-income children when we are in a time of budget crisis, as we are now.

Senator BURDICK. Let's look at a small school in a small town out there where only 27 out of the 100 students get any benefit out of the program. Isn't it going to be very difficult for that school district to support a kitchen, to support help for that number of people, if the paying students have no part of it?

Ms. JARRATT. Well, Senator, they are still getting the bonus commodities for all children, for all 100 children. That is about 10 cents a meal. I think it would depend on the options that that school district had for alternative forms of meal service.

The school district might have to contract with a fast food operator or some other kind of food service, which would probably be more expensive for the children than the meals we are providing.

Senator BURDICK. What does the paying student get, besides commodities?

Ms. JARRATT. For the paying student, the benefit is currently just above 12 cents in commodities, just above 12 cents in cash, and 10 cents in bonus commodities.

Basically, in school lunch funding, the average overall Federal subsidy is composed of about 80 percent cash and 20 percent commodities. In the paying category, it is about one-half cash and one-half commodities.

Senator BURDICK. What I understand your suggestion is, is that the big paying element, whatever it is, won't get any subsidies at all, outside of the commodities.

Ms. JARRATT. Outside the bonus commodities?

Senator BURDICK. Yes.

Ms. JARRATT. That's correct. We propose to eliminate the total entitlement for meals served to nonneedy children.

Senator BURDICK. I get back to my first question, then. There are only 27 percent that are getting any direct help in these school lunch programs, so I pose the question again: Is the school district able to maintain the program with that few participants?

Mr. LEARD. Senator, the paid meal recipient now pays an average of 82 cents for a meal. So it would only be raised another quarter to $1.07. They would still get the bonus commodities. We think that this, plus the subsidies that would be provided for the free and reduced-price meals, would be enough to keep schools in the programs. It is still a good buy and an efficient way to get food to the children.

Senator BURDICK. Well, that is kind of a speculative question, isn't it? What are they going to do?

Mr. LEARD. As you have said, we have seen the numbers that people have projected, but there is no way to predict exactly what would happen. There is a wide range of projections, depending on who you talk to, but we feel that it is still the best buy in town.

Ms. JARRATT. Senator, in 1981 we had a similar proposal that affected the paying category, except with a smaller reduction. We had the same kinds of projections of school dropout, which were fairly dramatic. Indeed, some schools did drop the program after that proposal. However, despite declining overall school enrollment, participation in the School Lunch Program has consistently been coming back up. Considering the nutritional value that these programs provide, we think it is a very good buy. We don't think that 25 cents a meal for the more affluent families is an unreasonable increase.

Senator BURDICK. All I have to say is that people in the field in my State are very nervous about this.

Ms. JARRATT. I understand, Senator.

Mr. LEARD. Senator, one more note of interest. We just computed that even with only 27 percent of your children in the lower income categories, you would still receive more than 70 percent of the total support you are now receiving, because a much larger proportion of the subsidy goes to the free and reduced-price meals rather than to the paid, plus the bonus commodities would continue to be available.

Senator BURDICK. Well, I guess each little school district will have to get a pencil and figure that out. If it doesn't pay, they will drop it, won't they?

Mr. LEARD. Approximately 70 percent of that money would still be there.

CHILD CARE FEEDING PROGRAM

Senator BURDICK. Well, we will soon find out, you know. What about the Child Care Feeding Program? If these funds are cut so drastically, day care providers will no longer be able to provide adequate meals to their charges. Is the administration's goal to eliminate the program from this budget?

Mr. LEARD. No, sir; not at all. We would like to make the means test a part of the Child Care Program again. We have had several studies of this program. One which was recently conducted showed that about 65 percent of the children in family day care programs are from families which earn more than 185 percent of the poverty level or $18,870 this year.

The inspector general did an audit of multistate sponsors, and your State is one that has a multiple-State sponsor. They found that over 70 percent of the children in these day care homes were from families which earned over 185 percent of poverty. Our position is that reinstatement of a means test would better target funds to the truly needy children.

Senator BURDICK. But the underlying argument seems to be that when you do that, you are reducing the direct program to a minority of the students, and that leaves a question of whether you can provide the proper financial basis.

Ms. JARRATT. Senator, the philosophy for this is fairly clear-cut. The administration needs to cut the deficit badly. We do not feel that it is our responsibility, at the current time, to fund meals for children from higher income families when their families are able to bear that responsibility themselves.

What we are proposing, in this family day care home proposal, is to reinstate a means test that was previously there. When the means test was eliminated in the early eighties, participation in the program became largely composed of higher income children.

It is very important to maintain basic services for needy children, but we do not feel that we should be funding the benefits for these higher income children. There is nothing in any of the proposals which eliminates any benefits at all for the children below 185 percent of poverty.

Senator BURDICK. Well, at least we can agree on one thing. You have asked for an appropriation for this facet of the program.

Ms. JARRATT. Yes.

Senator BURDICK. We agree on that?

Ms. JARRATT. Yes.

Senator BURDICK. How much is it?

Ms. JARRATT. We are requesting about $93 million for the family day care homes portion of the Child Care Food Program.

SCHOOL LUNCH PARTICIPATION

Senator BURDICK. Independent analysis has shown that for each 1-cent increase in the price of a school meal, 1 percent of the students stop eating at the school. Thus, the nutritional status of all the Nation's children will be impaired by the depth of cuts in the administration's proposals.

Is the administration moving away from the original goal of the School Lunch Program, as I said before, under this procedure?

Mr. BRALEY. Senator, I am familiar with the studies that you cite. There certainly is a relationship between prices charged for school lunches and participation.

I think, as has been stated here this morning, nutritious meals will continue to be available to all children in schools that participate in the School Lunch Program. The prices may be higher as a result of elimination of subsidies for nonneedy children, but the meal benefit will still be there.

It is a question of the Federal Government paying for the continuation of the subsidies, or the families paying what amounts to about $41 a year in extra costs so their children may continue to receive a very well balanced, nutritious meal.

Senator BURDICK. I know that the administration has stated that its goal is to better target the funds to the needy children by taking the subsidy from the paying child.

However, needy children have no lunch at their schools and are no longer able to participate in the program. So, my final question is: Aren't we taking quite a gamble that some of these schools will still have a school lunch program?

Ms. JARRATT. Senator, I certainly hope we are not. That is not the administration's intent. Again, I repeat that our overriding concern is to provide basic services for very needy people and to reduce excess where we feel we can. We believe that families at the higher income levels are able to bear the additional 25 cents in the case of the school lunch.

We certainly hope that schools don't make the decision to drop the child nutrition programs, because they give us a wonderful nutrition guarantee for the amount of money that we spend, and for which State and local communities make contributions.

We feel that with the high percentage of subsidy we will still retain for them, schools will not drop out of the programs.

Senator BURDICK. I am not quite as hopeful as you are. But nevertheless, I wish you well in your future endeavor.

Ms. JARRATT. Thank you, Senator.

NATIONAL FOOD CONSUMPTION SURVEY

Senator COCHRAN. Thank you, Senator. I notice that for the nationwide survey that will be conducted, there are additional funds being requested for the Human Nutrition Information Service budget. Will the cost of this survey be paid for completely out of the funds being appropriated during the next fiscal year, or is this going to be a multiple-year expense that will be incurred?

Ms. Wolf. The bulk of the cost will be covered in the fiscal year 1986 request.

However, there will be some costs for a further analysis of the results of the survey which will be coming along in future years. This has been the traditional way of budgeting these surveys. It takes us a few years, then, to do further indepth analysis.

Senator COCHRAN. There was a task force, the President's Task Force on Food Assistance, which expressed some concern about the lack of up-to-date data on the nutritional status of our population and certain subgroups.

Will this be alleviated, do you think, as a result of the survey and information that will be obtained there?

Ms. Wolf. I mentioned that we are initiating, in April, a continuing survey of the food intake of individuals. This will result in the development of a continuous data base over time with special attention to various low-income groups and groups at nutritional risk.

Some of this study is being funded by the Food and Nutrition Service. Also, our 1987 Nationwide Food Consumption Survey will be utilizing technologies which will enable us to have more rapid output of findings of the survey than was the case 10 years back. We are very sensitive to the criticism about the long-time delay that existed in the past in getting this information to the public.

REGIONAL OFFICE-ADMINISTERED CHILD NUTRITION PROGRAMS

Senator COCHRAN. I want to look into, further, the situation that we touched on briefly about the child nutrition programs that are administered at the local level by the Federal Government.

In addition to providing me with the list of the States in which these programs are administered, I would like to know how much it costs the Federal Government to operate these programs at the local level. I would like to have an indication of how many people are employed in the operation of those programs and more specific information on how the administration and operation of the program began and under exactly what authorization.

I would like to know the first year that those operations were funded by the appropriations bill over which we have jurisdiction. I would like for you to separate from the funding of the child nutrition programs, generally, the amount of money that is reflected by these programs and the costs of the operation of these programs.

Mr. LEARD. We will get that to you right away, Senator.

[The information follows:]

Operating Level of Programs Directly Administered by FNS

Fiscal Year	Child Nutrition	Special Milk	Total
1982	$145,249,127	$ 469,568	$145,718,695
1983	145,387,560	1,240,419	146,627,979
1984	150,340,802	851,445	151,192,247
1985 Est.	$159,995,556	$ 779,445	$160,775,001

Federal Administrative Costs of Programs Administered by FNS and Number of People Employed

Fiscal Year	Staff-Years	Federal Cost
1982	165	3,901,900
1983	142	3,604,580
1984	105	2,851,400
1985	70	$2,122,300

FOOD AND NUTRITION SERVICE PROGRAMS ADMINISTERED BY REGIONAL OFFICES—REGIONAL SUMMARY

P (PREFERENCE) S (STATUTORY PROHIBITION)

STATE	National School Lunch Program / School Breakfast Program (for nonprofit private schools) Beginning Year	Reason	Special Milk Program Beginning Year	Reason	Child Care Food Program Beginning Year	Reason	Summer Food Service Program Beginning Year	Reason
NERO								
New York			1955	P	10/1/81	P	10/1/81	P
MARO								
Delaware	10/1/78	P	10/1/78	P				
Virginia	1946/1966	S	1955	S	1970	S	1970	S
SERO								
Alabama (1)	1946/1966	S	1955	S				
Georgia	1946/1966	P	1966	P			1970	P
South Carolina (2)	1946/1966	S	1955	S	1970	S	1970	S
Tennessee	1946/1966	S	1955	S	1970	S	1970	S
MWRO								
Michigan							1970	P
Minnesota							1970	P
MPRO								
Colorado	1946/1966	S	1955	S	1980	S		
Kansas							1970	P
Missouri	1946/1966	P	1955	P	1970	P	1979	P
Nebraska	1946/1966	S	1955	S	1970	S	1970	S
North Dakota			1955	P			1970	P
Wyoming							1979	P
WRO								
Alaska (3)							1978	P
California							1979	P
Hawaii (4)	1946/1966	S	1955	S	1975	S	1975	S
Oregon			1955	P	1970	P	1970	P
Washington	1946/1966	S	1955	S	1970	S	1970	S

(1) The Alabama State Department of Education is scheduled to take over remaining National School Lunch, School Breakfast, and Special Milk Program operations on July 1, 1985.

(2) The South Carolina Department of Social Services is scheduled to assume administration of the Child Care Food Program on April 1, 1985.

(3) It is anticipated that the State of Alaska will take over the Summer Food Service Program in Fiscal Year 1985; however, no date has been set.

(4) The schedule for the takeover of administration by the Hawaii Department of Education is as follows:

- Summer Food Service Program - in time for Summer 1985 operations
- National School Lunch, School Breakfast, and Special Milk Programs - July 1, 1985
- Child Care Food Program - October 1, 1985

STATE LAWS AFFECTING PROGRAMS

Senator Cochran. You mentioned that there are some State laws that are said to prohibit certain States from operating these programs. I am assuming that these are State laws that relate to the fact that these are religious schools.

Mr. Leard. Yes, sir; separation of church and State.

Senator Cochran. That is the problem?

Mr. Leard. Yes.

Senator Cochran. Some of the States.

Mr. Leard. Yes, sir.

Senator Cochran. Yes; I would like to have an indication of which States you are talking about there and the extent to which the programs are being operated by the Federal Government.

Senator Burdick. Mr. Chairman?

Senator Cochran. Yes, Senator Burdick.

Senator Burdick. I would like to ask that by unanimous consent, some questions by Senator Bumpers be made a part of the record.

Senator Cochran. Without objection, they will be made a part of the record following today's testimony. Thank you.

ELDERLY PILOT PROJECTS

One difference between the elderly pilot programs which are operated by the Federal Government and the child nutrition feeding programs is that the elderly pilot programs are utilizing a commodity distribution format. Is that right?

Mr. Leard. That is correct, Mr. Chairman. There are three elderly pilot programs that are operating under the auspices of the Commodity Supplemental Feeding Program, and they are providing basket commodities rather than cash or rather than——

Senator Cochran. Cooked meals or anything like that?

Mr. Leard. Right.

Ms. Jarratt. These pilot projects were designed to determine if this method of aid would help the homebound elderly. That is written into the pilot project plan at the three localities.

Senator Cochran. How long have we been operating those three pilot programs? Three years, is that what you said?

Mr. Leard. A little over 2 years, I believe.

Senator Cochran. Is there any indication that you will request additional sites to be served by that kind of a program or plan? Are we just going to continue to favor these lucky three?

Mr. Leard. We are proposing that the projects be shifted over to Health and Human Services.

Ms. Jarratt. They would be operated by one of the aging programs at HHS.

Senator Cochran. Will that be the same kind of program that you are administering?

Ms. Jarratt. We are not proposing to change the structure for the elderly feeding pilot projects. It is an attempt to place the elderly feeding programs together in one house.

Senator COCHRAN. You buy the food right now? You pay them for the expense of buying food?

Mr. LEARD. We buy the food and basically, we are providing them with costs for administering the program, distribution and so forth. It has been a disservice for the project centers because parts of the elderly programs are served by Agriculture and parts are served by HHS. If the bulk of the programs serving the elderly are going to be at HHS, we think it makes more sense to have the State agencies dealing with basically, one Federal department. However, because Agriculture is involved in price support, we will continue to provide commodity purchasing and distribution services, if requested.

AID TO SOUP KITCHENS

Senator COCHRAN. What about the extent of assistance to soup kitchen-type operations, or churches where they provide food for the poor on a regular basis? Maybe it is a breakfast program, or maybe it is a breakfast and lunch program.

Are these activities supported in any way by the portion of the budget that is under the jurisdiction of our subcommittee?

Mr. LEARD. Yes, sir; we are providing commodities to congregate feeding sites—soup kitchens and other similar institutions—under our commodity program. We will continue to do that.

Ms. JARRATT. A lot of the expenses don't show up in the F&NS budget because the commodities are donated by the Commodity Credit Corporation. It is in the total department budget. We have some money in here for our congregate feeding activity, but section 32 and section 416 contribute to those congregate feeding sites. That is where we get the food.

Senator COCHRAN. Are the requests that are being made for those activities for next year about the same as they were for this year, or are they less or more?

Ms. JARRATT. They are about the same, Senator. Of course, the volume of distribution, especially the 416-type commodities, is fed by the inventory that we have.

Our philosophy for feeding programs is that, generally, we prefer the Food Stamp Program for needy households. The soup kitchen activity and the congregate feeding activity draws not only from us, but also from substantial private donations. We do not intend to discourage that in any way.

The bonus commodities—the ones that we are giving—we do intend to continue.

Senator BURDICK. Senator?

Senator COCHRAN. Senator Burdick.

Senator BURDICK. This program doesn't deal with cash. It only deals with commodities?

Mr. LEARD. Strictly with commodities.

SUBMITTED QUESTIONS

Senator COCHRAN. I have no other questions to discuss at this point. There are other questions that may occur to us as we review the work that we have done this morning and we may submit questions in writing to you. We hope you would be able to promptly answer us for the record.

Let me wish you well, Ms. Jarratt. I am going to miss seeing you at these annual events and working with you as closely as we have in the past to try to solve some of the problems that administrators of the programs face.

You have been very cooperative and very helpful as Assistant Secretary for this important activity. I congratulate you on your outstanding service to the country and to the Government and wish you all the best in whatever you do.

Ms. JARRATT. Thank you.

[The following questions were not asked at the hearing but were submitted for response for the record:]

QUESTIONS SUBMITTED BY SENATOR COCHRAN

Child Nutrition: Effects of Proposed Legislation

Question: How much will be saved by eliminating the cost of living adjustment (COLA) this year for Child Nutrition programs?

Answer: We have estimated that eliminating the cost-of-living adjustment will save about $38 million.

Question: In 1981, major changes were made in Child Nutrition programs, especially in the School Lunch program, which caused a decrease in participation. Have schools recovered the students they lost due to an increase in the price for a school lunch? What about the school breakfast program? Has it recovered?

Answer: Although there were price increases after the 1981 legislation, we do not believe that the changes in participation were a function of price increases alone. In the first year after this legislation, price increases probably influenced some of the participation declines of 2.9 million in the School Lunch and 0.5 million in the School Breakfast Program. However, many of these students have returned to the program, and the net change in lunch and breakfast participation from Fiscal Year 1981 to the present is about 7 percent.

Four factors explain most of this 7 percent decline. First, school enrollments have declined by about 4 percent between the fall of 1980 and the fall of 1984. Second, schools were required to use improved applications and income verification efforts were initiated in the school feeding programs cutting the rate of erroneous free and reduced-price applications in half. Third, as a result of the 1981 legislation, private schools with annual tuition charges exceeding $1,500 per year were removed from the program. Fourth, the maximum income allowed for reduced-price participation was lowered from 195 to 185 percent of poverty. Taken together, I think these four factors explain most of the 7 percent decrease in participation which occurred in the past 3 1/2 years.

Question: The Administration is proposing to eliminate from the School Lunch program all participants whose families have income which exceeds 185 percent of the poverty level. While on the surface this looks as though only the "non-needy" will leave the program, there is concern among school districts that the increase in price for lunch for the children will cause a substantial number of students to bring their own lunch, rather than to participate in the lunch program. Because of volume efficiencies and fixed costs of the current program, such an exodus would increase the per meal cost of the lunches, which eventually would drive many schools out of the program. Have you done any studies which would estimate the effect this program change would have on the schools involved?

Answer: The average price of a school lunch will remain low compared to the other meal services. We estimate about $1.07 per meal. This will encourage the continued consumption of school lunches by non-needy students. Therefore, schools should retain most of the revenues from these students and preserve the economies of scale to which you refer.

In terms of paying for a school's fixed costs in operating a lunch program, it is our belief that subsidies for free and reduced-price lunches provide the economic "backbone" of the program. Even in schools with fairly high percentages of paid meals, most of the Federal reimbursement still comes from the subsidies for free and reduced-price meals. This is due to the fact that per meal subsidies are so much higher for free and reduced-price lunches than they are for paid lunches.

As prices increase, participation among paying children may decline in the school lunch program, however the National School Lunch Program lunch will still be a bargain to upper-income children and has been shown to be nutritionally superior to alternative lunches. The average price should rise about 25 cents, from .82 cents to $1.07 per meal in School Year 1983-84 or the equivalent $41 per year. Since the average income for a family of four was almost $33,000 in 1983 these families can afford to pay an increased charge for their meals.

Question: Will projected increases in school enrollment possibly make up the difference in participation?

Answer: We do not expect significant changes. In terms of enrollment, the latest Department of Education estimates indicate that school enrollments will increase only [illegible]/10 of 1 percent this year, 1/2 of one percent next year, and will stabilize in Fiscal Year 1987.

Question: Is there a possibility that schools may have to have separate lines for paying and subsidized students, thereby creating a stigma associated with the program?

Answer: Our regulations will continue to prohibit overt identification of any category of program participant in the lunchroom. Schools have done an excellent job in this regard, and will continue to be required to protect the privacy of free and reduced-price program participants.

Question: According to the budget explanatory notes, the School Lunch Program will provide almost 24 million meals per day. What percentage is 24 million students as it relates to total school enrollment in the United States and in other places school lunches are provided?

Answer: There are currently about 44 million students enrolled in schools in the United States, of which about 40 million are enrolled in schools participating in the National School Lunch Program. The remaining children are in private schools that either choose not to participate in the program or charge tuition over $1,500 per year and are legally prohibited from participating. There are also some public schools that do not participate in the program, but about 98 percent of students enrolled in public schools have the program available. Average daily participation of almost 24 million children in schools participating in the program represents about [illegible]0 percent of the enrollment in those schools.

Question: There are some child nutritionists who feel that, if we must cut any child nutrition programs, the cuts should come from programs other than the School Lunch Program. Their reasoning is that the School Lunch Program reaches so many more people than the other programs. Also, they are concerned that those who will, under your proposal, pay the full price of a meal, would start "brown-bagging," and the nutritional encouragement of the program would be diminished. How would you respond to that?

Answer: This year, almost 24 million school children participate in the National School Lunch Program each school day; approximately 51 percent of those children are from non-needy families. In contrast, the majority of the participants in the School Breakfast and Summer Food Programs are from lower-income families. Our proposals are designed to protect those most in need while contributing to a reduction of the overall Federal deficit.

No child should lose access to the National School Lunch Program as a result of our proposal to limit support to the needy. Meals served to children from families with incomes above 185 percent of poverty will no longer receive cash and entitlement commodity subsidies (bonus commodities will still be provided); however, the National School Lunch Program lunch will still be a bargain. The average price should rise no more than by about 25 cents. At an average cost of $1.07 National School Lunch Program lunch will still be the best value, in both price and nutrition.

Question: What is the reasoning behind proposed bill language which will limit advances to child care institutions to $10,000?

Answer: Under current law, State agencies administering the Child Care Food Program must provide advance payments to each approved institution. Advances are based on the estimated amount of reimbursement an institution will earn in the month(s) for which the advance is made. By the tenth of the month following the participating month(s), institutions must submit a claim in order to reconcile their earnings with advances received from the state.

Larger institutions serving more children would presumably be better financed and consequently be in a better position to sustain program operations month-to-month with the more limited operating advance that we propose. On the other hand, smaller child care institutions would be little affected by our proposal.

Problems arise when advance payments are greater than actual meal payments earned. By limiting advance payments to $10,000, it will make the reconciliation of advance payments with claims for reimbursement simpler for state agencies because advance payments will be less likely to exceed earnings. Further, we believe the amount is adequate to meet the needs of most child care institutions.

Question: In the past few years, the Administration has proposed eliminating the Nutrition Education and Training (NET) program. Why is it retained in this budget?

Answer: The Administration continues to believe that promoting nutrition education in the schools is a worthwhile activity, but one that is best left to State and local initiative. However, it is recognized that States do need time to make a transition to a program that is not supported with Federal funds.

Question: Please provide a list for the record, by program and amount, how the $686 million savings in Child Nutrition Programs due to proposed legislation was computed.

Answer: The list of savings by program follows:

	(millions)
National School Lunch Program	$497
School Breakfast Program	9
Child Care Food Program	172
Summer Food Service Program	6
Commodities	2
	$686

Child Care Program Participation

Question: In Fiscal Year 1984, the Family Day Care Homes program cost about $159 million. In Fiscal Year 1985, it will cost $199 million, a $40 million increase. The Fiscal Year 1986 budget, under current law, calls for an additional $40 million, to about $240 million. This is a 51% increase in two fiscal years. What is the reason for this?

Answer: Child Care Food Program participation at family day care homes tripled between 1980 and 1984. As more women joined the work force in recent years, both as heads of households and in households where both parents worked, more day care facilities were needed. The elimination of the means test in 1980 also encouraged participation by families at all income levels and has contributed to the program's growth and particularly the growth of payments on behalf of non-needy individuals. About 65 percent of these participants come from non-needy families, that is, with incomes above 135 percent of the poverty line. If no changes are made in the program. Participation could continue to grow and the Federal Government will subsidize more non-needy families.

For this reason, we propose to reinstitute the income test that existed in the program prior to 1980.

Question: What is the reason for a 28 percent increase in two fiscal years for free meals in child care centers in the Child Care Food Program?

Answer: The 28 percent increase represents the change in appropriated funds between Fiscal Year 1984, $159 million and our projected level of cash assistance in Fiscal Year 1986 for free meals in day care centers, $203 million. The appropriated level represents what we expected free meals to cost in 1984. The amount obligated reflects the meals actually served and is a better indicator of program costs. The increase in funds obligated between Fiscal Year 1984, $169 million and Fiscal Year 1986, $203 million is about 20 percent. The increase is related to both adjustments in subsidies to account for inflation as well as continued growth in the number of meals served in the program. Inflation increased subsidies by about 9 percent between 1984 and 1986. The number of free meals increased 8 percent in that same period.

Question: Under current law, there will be an increase in commodity procurement of $17 million. Together with last year's increase for this purpose, commodity procurement will have increased 57% in two years. Why is this?

Answer: The $17 million increase is the result of two factors: the number of meals served and the subsidy rate per meal. The program legislation provides that each meal will receive a specified level of commodity support and that this amount will be adjusted annually based on changes in the Producer Price Index. The increases projected for the number of meals and for the pricing index cause a rise of about 3.4 percent in the funding needs for Fiscal Year 1986.

Since the value of Section 32 commodities is being maintained at $350.9 million, the full increase occurs in the child nutrition appropriation.

Question: Is there any way to determine whether the Summer Food program is reaching only low-income children?

Answer: It is doubtful that the Program reaches only low-income children. Currently, the law requires that Summer Program sponsors serve geographic areas in which at least one-half of the children are eligible for free and reduced price school meals. However, it is not possible to estimate the mix of low-income and upper-income participants in the program.

Question: I understand that the definition and eligibility criteria for family day care centers varies widely among the states. The Administration is proposing to require a means test for Federal reimbursement of these programs. Is anything being done to encourage some uniformity in eligibility criteria?

Answer: The law and the Child Care Food Program (CCFP) regulations establish two basic eligibility criteria for family day care homes wishing to participate in the CCFP. First, these homes must have Federal, State or local licensing or approval, or, where licensing is not available, they must meet alternate approval standards developed by the Department. Secondly, day care homes must participate under the auspices of a sponsoring organization. While these requirements are uniform, it must be noted that licensing standards may vary among different jurisdictions, depending upon local conditions and concerns. In these instances, the Department considers that it would be inappropriate to attempt to impose uniform Federal standards on State and local licensing agencies. Moreover, individual sponsoring organizations can impose conditions on their homes which go beyond the minimum standards set forth in the regulations. As long as these additional conditions do not result in discriminatory treatment of some homes, the Department cannot intervene in these situations.

Question: Your explanatory notes, in listing the sources of commodities in the Child Nutrition programs, separates "FNS commodities" from "AMS Section 32 commodities." Could you explain this distinction and what factors determine the source?

Answer: Commodities used in the child nutrition programs are funded from two separate sources. "FNS commodities" are purchased with funds appropriated in the Child Nutrition Programs account and generally consist of non-perishable items such as grain, oil and peanut products. "AMS Section 32 commodities" are purchased with funds appropriated to the Funds for Strengthening Markets, Income and Supply account of the Agricultural Marketing Service. These funds are used for perishable items such as fruits, vegetables, meat and poultry. The total value of purchases to fulfill commodity entitlement requirements is determined by the number of eligible meals and the commodity entitlement rate per meal established by law.

Question: Please explain the difference in the "transfer from section 32." which funds a portion of the Child Nutrition programs and "Section 32 Funds for Strengthening Markets, Income, and Supply."

Answer: Under Section 32 of the Act of August 24, 1935, thirty percent of customs receipts collected during the preceding calendar year plus any unused balances up to $300 million are available in the Funds for Strengthening Markets, Income, and Supply account. Traditionally, the Agriculture Appropriation Act authorizes a transfer from this account which funds a portion of the cost of the Child Nutrition Programs. The funds remaining in the section 32 account are available for surplus removal activities carried out by the Agricultural Marketing Service.

Question: In the explanation of the proposed legislative changes, the explanatory notes state that a means test for "family day care home" participants would reestablish eligibility requirements under the program. Are there no requirements now? Is this the only child nutrition program which does not require a means test?

Answer: Currently, there are no income or other eligibility requirements in the Family Day Care Home portion of the Child Care Food Program, except for children of the providers whose family income must be below 185% of poverty. Otherwise, all meals served in eligible day care homes receive the same subsidy. The School Lunch School Breakfast, Day Care Centers participating in the Child Care Food Program, and Special Milk Programs require an income eligibility test. The Summer Program requires that sites meet a geographic area eligibility requirement, but all meals are reimbursed at the same rate regardless of the family income of participants.

Our proposal re-establishes a means test which existed in Family Day Care Homes until May of 1980. The absence of a means test is a significant problem. Currently about 65 percent of participants come from families with incomes above 185 percent of the poverty line. Further, the means test will establish consistency between meals served in Day Care Homes and meals served in other Child Nutrition Programs. Most importantly, it will restore equity in the subsidies provided to children in day care centers and day care homes. Currently, parents who happen to send their children to day care centers must establish their eligibility for free and reduced price meals. Meanwhile, those being served in day care homes receive a meal subsidy almost equivalent to the free rate provided in centers without any income test whatsoever. Our proposal ends that inequity.

Question: The total number of schools and residential child care institutions declined between fiscal years 1983 and 1984. What do you suppose is the reason for this? What is the most common reason for an institution to terminate participation in the program?

Answer: The number of participating sites decreased by 971, or about one percent, between October of 1983 and 1984. In the same time period, elementary and secondary school enrollment also declined by about one percent. The effect of declining enrollment on school closings and consolidations has been observed for a number of years. Since there were no major budget policy changes in the Federal child nutrition budget between 1983 and 1984, the entire decrease in participating sites is probably attributable to these enrollment changes.

Question: What will be the effect of prohibiting Federal administration of Child Nutrition programs in those States which choose not to implement the programs?

Answer: The Food and Nutrition Service administers one or more of the Child Nutrition Programs in twenty States. Eight of these States assert constitutional prohibitions against administering the programs, and the remaining twelve States choose not to administer them. The budget proposal would enable USDA to continue to administer the programs in those states in which the State Agency is prohibited by law from disbursing funds to non-public schools and institutions. We are confident that those States without legal prohibitions against administering the program will choose to continue nutrition benefits for their children.

Question: In which States do you now operate the programs? Which States will be eliminated?

Answer: Currently, USDA administers Child Nutrition Programs in the following States:

A. States claiming a constitutional prohibition:

Virginia

Alabama

South Carolina

Tennessee

Colorado

Nebraska

Hawaii

Washington

Maine - With no non-residential RCCI's

B. States choosing not to administer:

New York

Delaware

Georgia

Michigan

Minnesota

Kansas

Missouri

North Dakota

Wyoming

Alaska

California

Oregon

Question: How much money will be saved?

Answer: No dollar savings are intended by this proposal.

Question: Will States which serve 60% of their school lunches to non-needy students continue to receive an additional 2¢ subsidy under your proposed legislation?

Answer: I assume you are referring to school districts which serve at least 60 percent of their lunches to needy children. The details of this provision under proposed legislation are under review.

Commodity Supplemental Food Program (CSFP)

The explanatory notes indicate that sufficient quantities of fiscal year 1985 inventory and unshipped commodities are available to cover increased need because of increased food costs.

Question: Are these commodities in USDA storage or are they stored by State and local agencies?

Answer: State and local agencies that administer the Commodity Supplemental Food Program maintain commodity inventory levels that allow flexibility in the food ordering and shipping process. It is often necessary for States to accept more food than they need in order to fill railcars. In addition, States may over-order to ensure they have sufficient food during periods of inclement weather when shipments may be delayed or cancelled. This extra inventory is considered as food available to support participation.

Question: What kinds of commodities are donated and what kinds are purchased for this program?

Answer: A variety of commodities are purchased by USDA for CSFP including fruits, vegetables, evaporated milk, dehydrated potatoes, farina, egg mix, canned meat, juice, infant formula, infant cereal and dry beans or peanut butter. Donated commodities are foods that are acquired under various agricultural programs and donated to the CSFP. They include nonfat dry milk, processed cheese, butter, honey, raisins and rice.

Elderly Pilot Projects

The Elderly Commodity Distribution Pilot Program has been very successful in DesMoines, Detroit, and New Orleans.

Question: What benefit would be gained by transferring these projects to the Department of Health and Human Services?

Answer: Added administrative efficiency would be gained by transferring the Elderly Feeding Pilot Projects to the Department of Health and Human Services (DHHS). A number of nutrition and other programs targeted exclusively at the elderly have long been administered by DHHS. These include the Home Delivered Meals and Congregate Meals Programs authorized under Title III-C of the Older Americans Act of 1965. Better coordination of services will result from consolidating programs that serve the elderly exclusively under the management of the same Department.

Question: If Congress chooses to keep the program under USDA jurisdiction, do you see an expansion in the number of cities served?

Answer: The Department does not have authority to determine how many sites will operate an elderly feeding pilot project. The number of sites is limited by legislation. The Food and Agriculture Act of 1981, Public Law 97-98, authorized the Secretary to establish two pilot feeding projects for low-income elderly persons as an outgrowth of the Commodity Supplemental Food Program. Public Law 97-370 mandated initiation of project operations at a third site. Subsequent appropriations have made funding available only for the three specifically named locations where projects now operate.

WIC Participation

Question: I was pleased to see that the Administration is requesting a funding level for Women, Infants, and Children (WIC) program which provides for participation to be maintained at roughly the same level as this fiscal year -- about 3 million. This is quite a change from your previous position that WIC should be cut. What caused this change in policy?

Answer: In the Fiscal Year 1986 budget, the Administration is seeking to protect the low-income needy. We would maintain participation at about its current level of 3 million participants. Last year, we had a similar overall goal, but we sought to slightly trim

WIC participation to 2.7 million participants. In both cases, we wished to target program benefits to the pregnant women and infants who most need the program.

Question: The Administration has argued that the WIC program should be only for women and infants, but not for children, because there are sufficient other programs available for feeding children. What other programs are available?

Answer: First, I wish to avoid some possible misunderstanding. We believe that pregnant women and infants benefit most from the WIC Program and should be the major program beneficiaries. There are some needy children who deserve to participate, but currently half of the program participants are children, which is more than we would like to see. Our goal is to target participation, to decrease the share of children, not to eliminate them.

Second, it is true that other food assistance programs are available to serve young children. These include the Child Care Food and the Summer Food Service. Other family oriented programs, such as the Food Stamp and Needy Family Programs, serve the entire age spectrum, including children.

Question: This program is designed for those who are poor and are determined by a physician to be at nutritional risk. It provides certain commodities which will meet the specific nutritional deficiencies in the diets of the people in the program. I understand why you would not want numerous programs serving similar needs; however, it seems as though this program would be the one the Administration would support, since it provides for specific needs and cannot be used for other purposes, as food stamps or cash payments could. Why does the Administration feel differently?

Answer: The Administration supports the WIC Program. However, the WIC Program has grown rapidly in recent years more than doubling in cost between 1980 and 1984, from $700 million to $1.4 billion. Participation during this same period has climbed 60 percent, from 1.9 million to 3.05 million persons. We believe that this program needs to be stabilized and better targeted so that its focus will be on pregnant women and infants.

Question: Is there any documented evidence that these other programs would serve the nutritional needs of the children in this program better than WIC does?

Answer: We are not aware of any study comparing the relative nutritional value of the various programs for children.

Question: The Continuing Resolution under which Agriculture is now operating called for WIC funds to be allocated to the States at a rate of $1.5 billion. Is that provision in the law being carried out? If not, why not? How do you get around the fact that the allocation rate of $1.5 billion is mandated in the law? Why did you not submit a deferral or rescission request?

Answer: The 1985 Continuing Resolution appropriated $1.254 billion for the first ten months of Fiscal Year 1985 and made the amount of funding for the last two months of the fiscal year contingent upon the Administration's request. Accordingly, a further $169 million was made available with the transmittal of the Fiscal Year 1986 Budget. All Fiscal Year 1985 funds have been apportioned in a manner that is both responsible and consistent with the Continuing Resolution, and which will sustain the approximate WIC caseload of 3 million.

(Clerk's note. At present time this matter is in litigation in the case of Maddox vs. Block et al.)

Question: The law states that $1.25 billion is appropriated through August 1. The Committee report states that carryover funds from the previous year should be available in addition to this amount. Will all that money be obligated by August 1?

Answer: We anticipate that these funds will have been obligated to State agencies by August 1.

Question: Mr. Leard, according to your statement, you state that the WIC participation will "stabilize" at about 3 million by year-end. Does this mean 3 million participation at year-end, or a yearly average of 3 million by year-end?

Answer: It means about 3 million participants during Fiscal Year 1985 and, given enactment of the Administration's Budget, 3 million as a yearly average in Fiscal Year 1986.

Question: Based on the provision in the Continuing Resolution which called for a $1.5 billion allocation rate, State WIC agencies planned their programs based on their calculations of their share of the $1.5 billion. Now it appears as though $1.5 billion will not be spent, leaving State agencies with the dilemma of dropping people from the rolls, only to add them back during the next fiscal year. The Administation is getting the blame for this roller coaster effect. How do you respond to this?

Answer: With the transmittal of the Fiscal Year 1986 Budget, WIC State agencies were assured of full-year funding levels sufficient to maintain the WIC caseload at about 3 million participants. Since that time, States have been able to plan and manage their caseloads in a responsible fashion. We expect no roller-coaster effect since the Administration's policy would continue to support a 3 million WIC caseload in Fiscal Year 1986.

Question: What benefits will be gained if Congress approves the consolidation of the WIC program and the Commodity Supplemental Food Program? Will there be any budget savings due to this?

Answer: No, there wouldn't be any budget savings due to the consolidation of these two programs. Since the Special Supplemental Food Program and the Commodity Supplemental Food Program both have similar objectives in providing supplemental nutritious food to women, infants and children, it would be more efficient from an administrative perspective to combine these programs into a single appropriation in order to simplify financial management.

Question: The major infant formula producers (only 2 hold almost all of the market) have recently announced a significant increase in their prices. In addition, orange juice prices are expected to increase as a result of the freeze in Florida this winter. Do you have plans to submit an amended budget request to Congress as a result of those unexpected events and their impact on the cost of WIC food packages?

Answer: We have no such plans at this time. When we present budget estimates, it is always necessary to project annual inflation based on the best evidence available at the time. This is conventional for the Administration, as well as the Congressional Budget Office. For WIC, inflation projections were based on the Thrifty Food Plan index, which projects changes in the retail prices of a market basket of food. This index projected 4.3 percent inflation between Fiscal Year 1985 and Fiscal Year 1986. For infant formula prices, we assume some price increase. For unexpected events, such as the Florida citrus freeze, it is difficult to assess the impact, but it is probably small. Juice comprises only about one-sixth of the total WIC Program food costs. Damaged oranges are frequently converted to juice, with a minimal effect on prices. Freeze effects may be greater for fresh oranges which are not part of the package.

Question: Please supply for the Committee the assumed cost of each item in WIC packages for fiscal year 1985 and fiscal year 1986. Please also indicate the basis on which the increase in cost is estimated, whether by CPI or other basis.

Answer: The program regulations authorize six different food packages, each containing a different combination of food items and designed for a different class of participant. For example, the food package for infants under three months old contains only infant formula, while the package for pregnant and breastfeeding women contains milk, cheese, eggs, cereals, fruit/vegetable juices and legumes. We do not directly receive data on the prices of specific food items; our reporting system collects data on the aggregate cost of food provided to participants. The Budget projects that this cost will amount to $31.55 per person per month in Fiscal Year 1985 and $32.90 per person per month in Fiscal Year 1986. The increase from one year to the next is based on the Thrifty Food Plan Index.

Question: The explanatory notes show that the increase in the assumed WIC package cost is based on the projected increase in the Consumer Price Index (CPI) for the Thrifty Food Plan. The WIC package has specific items which would not be a part of the Thrifty Food Plan. I also understand that last year's increase was based on the CPI for the WIC package, which seems logical. Why did you base the WIC cost increase on the Thrifty Food Plan CPI?

Answer: There are only a few alternatives for WIC price projections, based on retail food inflation. One alternative considered was the newly developed Economic Research Service (ERS) WIC index, which is specific for WIC foods. In contrast, the Thrifty Food Plan index is for a larger market basket of foods, some of which are not WIC foods. The indices give similar estimates. For example, for Fiscal Year 1985, both estimate food inflation of 2.65 percent.

The Thrifty Food Plan index was selected because it has been available for a longer time and is better understood.

Question: Was last year's estimate based on the CPI for the items in the WIC package? Why did this change this year?

Answer: Both last year and this year, the Administration's inflation estimates for the WIC Program were based on the projections of the Thrifty Food Plan index. Our methods did not change. The Thrifty Food Plan index is very similar in nature to the Consumer Price Index for Food at Home.

Question: Does the Administration plan to start reducing WIC allocation levels to States sooner than the 4th quarter? If so, when will reductions begin?

Answer: Although WIC funds are allocated to States on a quarterly basis, State agencies are given an annual authorized grant.

Alcoholic and Drug Rehabilitation Centers

Question: As you are aware, we have been attempting to demonstrate the original Congressional intent pertaining to a provision we included in the Continuing Resolution of 1984 (98-107) which allowed food stamps to be redeemed by alcoholic and drug rehabilitation programs at publicly-operated community health centers. The intent was clearly that this was a permanent change in law, but I understand that states have now been notified that this authorization has expired, and they can no longer redeem food stamps for these centers. You and I have corresponded on this matter, and I understand that this decision is being reconsidered. Can you give us an update on this matter?

Answer: Public Law 98-107 expanded the definition of drug and alcoholic rehabilitation centers to include publicly operated community mental health centers. Under the Food Stamp Act of 1977, only private nonprofit centers could qualify for participation. Eligibility of the centers and their residents for food stamp benefits was announced through an agency notice issued November 14, 1983.

Public Law 98-107 expired October 1, 1984. As a result of discussions within the administration, authorization for the public centers to participate was considered to have expired upon expiration of P.L. 98-107. Agency regional offices were advised of this decision and of the procedures to remove publicly operated community mental health centers and their residents from program participation in a December 14, 1984 memorandum from the agency Administrator. All terminations were to have been completed by March 1, 1985, in accordance with agency instructions.

Question: Could you explain for the Subcommittee the Community Work Experience Program which you propose to make mandatory next year?

Answer: The proposal for Community Work Experience Programs (CWEPs) would require all State agencies to operate CWEPs and would require covered household members to comply with CWEP requirements or lose food stamp benefits for their households.

The household members that would have to satisfy the CWEP requirements would be those subject to food stamp work requirements and those who are only exempt because they are complying with the work requirements of the Federal-State unemployment system. The total monthly household food stamp CWEP requirement would be the number of hours obtained by dividing a household's monthly allotment by the higher of the State or Federal minimum wage. However, the maximum CWEP requirement would be 120 hours per month for each covered individual in combination with any other work. This is comparable to the current maximum of 30 hours per week for participants in the Food Stamp Optional Workfare Programs and the number of hours otherwise nonexempt persons must work to be exempt from the food stamp work requirements. Also, failure to report for an interview or perform work without good cause would result in a two-month disqualification period for the household. However, disqualifications could be "cured" by household members who "work off" the value of food stamps received during periods of noncompliance.

State agencies would be given three years to develop and fully implement CWEPs. A State agency performance standard for CWEP would be set at 25 percent of work registrants in Fiscal Year 1986, 50 percent in Fiscal Year 1987, and 75 percent in Fiscal Year 1988 and subsequent years. A State agency would have to offer CWEP jobs or take action against the required percentage of work registrants each month.

Question: How will its implementation save $16 million?

Answer: We believe that this proposal will save $16 million in Fiscal Year 1986. This will grow to $33 million and $53 million in Fiscal Year 1987 and Fiscal Year 1988 as higher level of implementation occur.

The savings are the net of Federal administrative costs and benefit reductions. Federal administrative costs will be $62 million in Fiscal Year 1986. Benefit savings will be $78 million. Additional Federal tax revenues from additional earnings are benefits that aren't included in the Department's budget discussion.

Question: How does this compare to similar programs under other Federal "welfare" programs, as Miss Jarratt's statement refers to them?

Answer: Our proposal is similar to that being introduced by the Department of Health and Human Services for the AFDC program. In both cases employable recipients will be asked to work in community service jobs. There are differences in program costs and benefit savings between the two proposals because there are differences between the Food Stamp Program and AFDC in the numbers of employable recipients, benefits amounts being worked for, turnover among recipients, and in the need for participant reimbursements.

Question: Please explain the reasoning behind your request of a State administrative grant for the Food Stamp Program.

Answer: The administrative cost grant will replace the current requirement that States match 50 percent of the administrative cost of the Food Stamp Program. It is proposed in conjunction with similar grants by the Department of Health and Human Services for AFDC and Medicaid.

The administrative cost grant provides a simpler and more flexible package of administrative funds for States to manage three major programs for the low income population--Food Stamp, AFDC, and Medicaid. Program administration will be simplified by eliminating complicated matching formulas. At the same time, the grants create stronger incentives for States and local agencies to identify and implement management efficiencies since any savings in administrative costs can directly reduce State costs without changing the amount of the Federal grant.

Question: What kind of management improvements do you expect the States to implement in order to make up for the administrative funding freeze at the fiscal year 1985 level, which will be an effective decrease of $40 million?

Answer: In proposing State administrative grants, we have not presupposed specific management improvements that States will implement as our goal is to promote State administrative flexibility. We believe that in every State there are efficiencies that can be put in place to produce administrative dollar savings, such as: computerization, paperwork management, and cost-effective personnel practices, including contracting. At the Federal level, technical assistance will continue to be available, and we will continue to provide a clearing-house function for the sharing of information on effective economies. We are certain that the grant, by eliminating the matching requirements, will spur each State to discover the techniques that works best to reduce expenses in that State. Administrative dollars saved will decrease State expenditures on the program.

Question: Why are you proposing that States be allowed to transfer funds to other State-administered programs?

Answer: The budget proposes that up to 10 percent of each grant be available for administering other federally-funded, State-administered programs in order to give States new flexibility to allocate resources to programs that provide assistance to many of the same groups of people. The final Food Stamp proposal may not include transfer of funds to other State-administered programs.

Question: Is similar language included in the budget request for other affected agencies?

Answer: The Department of Health and Human Services is proposing similar grants for the AFDC and Medicaid Programs.

Question: What legislative changes in the Aid to Families with Dependent Children (AFDC) program will affect Food Stamps?

Answer: There are several changes being proposed for the AFDC program which are closely aligned with proposals for changing the Food Stamp Program. These changes will improve the administration of both programs. They include a proposal for stronger work requirements, including establishment of Community Work Experience Programs, CWEPs and a proposal to provide administrative funding in the form of fixed grants subject to subsequent adjustment for inflation. These grants replace the Federal matching of State expenses. We firmly believe that a more coordinated approach to work requirements in these two programs will result in more recipients moving into regular employment. We also believe that the provision of administrative grants to State agencies for these programs, and Medicaid will simplify program administration and will provide a direct inducement for States to enhance the efficiency of their operations.

There are two other proposals being offered for the AFDC program that will result in slightly increased costs for the Food Stamp Program. The first of these changes makes a parent or caretaker relative ineligible for AFDC when the youngest child reaches age 16, if that relative is considered employable. If the relative were actually employed, a portion of the relative's earnings would be considered available to the child. This change results in reduced AFDC grants and slightly increased food stamp allotments for these households. The second change denies AFDC assistance to unmarried mothers under a minimum age, to be established by the State, who move out of their parent's home. Exceptions could be permitted if there is no parent or guardian living whose whereabouts is known, if the health or safety of the mother or child is threatened by living with the mother's parents, or the mother was living apart from her parents a year before the birth of a child or before the date of application for benefits. There is an existing AFDC requirement for a portion of the income of a minor mother's parents to be considered available to the mother if she is living with her parents. This change will have the effect of reducing AFDC allotments by eliminating payments for most minor mothers not living with their parents and by providing lower payments (due to inclusion of some parental income) for those who would otherwise have been inclined to live separately. A lowering of AFDC payments tends to increase food stamp allotments. In tandem, these two changes are expected to increase Food Stamp Program costs by $36 million in Fiscal Year 1986.

Question: Why do you propose to eliminate the language which allows up to 5 percent of the funds to be placed in reserve?

Answer: Legislation applicable to all Federal departments for reserving funds has been codified in 31 U.S.C. 1512. Deletion of similar authority under the annual food stamp appropriation would simply avoid duplication.

Question: The budget requests a decrease of $3.1 million (from $8.6 million) for research, evaluation, and demonstration projects. What is the status of such projects?

Answer: Since Fiscal Year 1983, twenty new Food Stamp projects have been initiated. These included five demonstrations, in addition to a range of program evaluations and more general research efforts. In the same period of time, eight projects have been completed and interim reports received for most other studies.

Question: How much has been spent in the past few years on research and demonstration projects?

Answer: The dollars spent in Fiscal Year 1983 and Fiscal Year 1984 are $9.6 and $7.1 million, respectively. The Fiscal Year 1985 allowance approved to date is $5.5 million.

Question: Has any benefit been derived from these projects?

Answer: Yes, the information obtained has contributed substantially to developing a Federal position in a variety of areas. Several demonstrations and evaluations have been or are currently being conducted to identify the cost-effectiveness of changes in recipient requirements and program operations. For example, the Work Registration and Job Search project compared seven work registration models in terms of cost, number of job placements and reduction of program abuse. Job search model guidelines are forthcoming. Similarly, the Monthly Reporting and Retrospective Budgeting Study analyzed the impact of increased recipient reporting on case load size and turnover; dollar amount and accuracy of benefit payments; and administrative costs. The current demonstration and evaluation of the electronic benefit transfer system are part of a larger FNS effort to identify issuance and redemption procedures that are less costly and more resistant to fraud and error.

Some of these research efforts are in direct response to legislative request. The Puerto Rico Evaluation is measuring the effects of changing food assistance program benefits from coupons to cash. The Evaluation of Expedited Service will provide nationally valid estimates of the number of characteristics of Food Stamp households receiving expedited service. It will also assess the impacts to two legislated changes: the 1982 changes in the expedited service provisions and the 1981 change to proration of initial month benefits.

Other studies are targeted primarily for State Agencies, by providing information on effective practices that, historically, fall into areas of State discretion. For example, The Fraud/Error Prevention Study is examining the relationship between error rates and certification management and verification procedures in order to identify effective fraud prevention techniques. The Wage Match Study identified the costs, benefits and procedures associated with matching operations judged to be effective.

Finally, some efforts contribute to the budget planning and legislative analysis process. The Microsimulation Study estimates program costs and participation under alternative proposals. This work includes examination of multiple program participation.

In sum, these projects enable the Agency to respond knowledgeably to Congressional inquiry, to anticipate more accurately the impacts of proposed program changes, and to identify cost-effective methods of program operation.

Question: Why is funding being curtailed?

Answer: The reduced budget proposal is in response to government-wide implementation of the Deficit Reduction Act affecting consulting services. In addition Fiscal Year 1984 obligations will fund activity in Fiscal Years 1985 and 1986.

Question: Your explanatory notes show that the fiscal year 1986 excess state error liabilities will increase from $22 million to $139 million. Why do you expect this?

Answer: The figures you cite are not excess state error liabilities. Rather, they are the amounts we expect to collect from prior fiscal year liabilities. The $22 million in Fiscal Year 1985 is for liabilities incurred in Fiscal Years 1981, 1982 and 1983. The $139 million in Fiscal Year 1986 is for liabilities incurred in Fiscal Years 1984 and 1985. The magnitudes differ because of changes in the error sanction system during this time span. The error rate targets were much higher in the earlier years, and, as a result, the liabilities were much lower. The targets for Fiscal Years 1981 and 1982 were based on the national average total error rate, which was about 12 percent in each year. Starting in Fiscal Year 1983 the target error rate was lowered, first to 9 percent, and then 7 percent in Fiscal Year 1984 and to 5 percent in Fiscal Year 1985.

Question: Have any States paid current sanctions against them?

Answer: Only one state, Connecticut, has paid a current sanction from the April to September 1981 review period although the sanction liability is under judicial review. Payment was made to avoid interest accumulation on the liability pending judicial determination of the matter.

Question: One complaint about the food stamp program is that, since change is given in normal currency, items may be purchased which are not items eligible for food stamps. Is any consideration being given to restoring the requirement that change be made in coins unique to the Food Stamp Program?

Answer: We are not currently considering a requirement for change to be made in coins unique to the Food Stamp Program. While we are aware that some complaints have resulted from recipients using change to purchase ineligible items, we have no evidence that the problem is serious enough to warrant a return to the previous credit slip system which was used prior to 1978. Under the old system, credit slips were generated by retailers. This meant that recipients had to return to the store that issued them in order to use them. They complicated the redemption process and many went unredeemed.

Recipients lost benefits and retailers profited by the full value of credit slips that went unredeemed. While the problem of unredeemed benefits was not as obvious as that of recipients using change for ineligible items, it still resulted in benefits not being used for the intended purposes of the program and stands as a key reason for not returning to the older system. Finally, it should be noted that recipients are now only receiving change in currency for amounts less than one dollar. That is, if a recipient is due $3.75 in change, he or she would receive three unendorsed one-dollar food stamps and seventy-five cents in coins. This procedure tends to limit the scope of the cash change problem. Retailers also have the authority to refuse to redeem food stamps if they determine that a recipient is abusing the system to obtain cash in change. For these reasons, we are not planning any further modification of the system at this time.

Special Milk Carryover Funds

Question: Last year, Congress appropriated the Administration's budget request of $17.6 million for the Special Milk Program. Now it looks as though $6.2 million - 35 percent - will be carried over into fiscal year 1986. What is the reason for this?

Answer: Submitted in January 1984, the Fiscal Year 1985 budget request assumed a total program level of $19.5 million for 200 million half pints of milk. This was to be partially funded by an unobligated balance of $1.9 million that was estimated for carryover from Fiscal Year 1984. As it turned out, nearly $4.4 million was carried over from Fiscal Year 1984 due to 12 percent fewer half-pints being served than had been estimated. The program level in Fiscal Year 1985 has now been reestimated downward to $17.3 million, due to an 11 percent lower estimate of half-pints to be served. The combination of a larger Fiscal Year 1984 carryover and a smaller Fiscal Year 1985 program level has resulted in an increased estimated carryover of $6.2 million into Fiscal Year 1986 rather than the elimination of carryover in Fiscal Year 1985. The reduced budget request of $11.5 million for 1986, plus the estimated carryover, will provide sufficient funds to fully operate the program in Fiscal Year 1986.

Question: The Special Milk program provides milk to non-needy as well as needy children whose school or summer camps are not served by another FNS meal program. During this fiscal year, it is estimated that, of 180 million half-pints of milk subsidized by this program, only 10 million - less than 6% - are served to needy children. I am not advocating that you cut or eliminate this program, but I am curious as to why you are not proposing elimination of the non-needy subsidies in this program as you are in the other Child Nutrition programs. Could you explain your reasoning?

Answer: The Special Milk Program has always been a vehicle for maintaining a product of superior nutritional value in schools at a modest cost. Program coverage is limited to schools which do not participate in other Federal feeding programs that already require the inclusion of milk.

Temporary Emergency Food Assistance Program (TEFAP)

The storage and distribution payments which have been made the last three fiscal years under the Temporary Emergency Food Assistance Program (TEFAP) have greatly assisted States in the handling of commodities under the commodity donations programs. State agencies have begun to depend on these funds, but fiscal year 1985 is the last year of TEFAP's authorization.

Question: Are you requesting reauthorization? If not, why not?

Answer: The Department is not requesting reauthorization of TEFAP. We will continue to make surplus commodities available for distribution to the needy under other existing legislative authority. The elimination of TEFAP, as a specific program, would save $50 million annually in administrative costs. State and local authorities working with private groups successfully took the initiative prior to TEFAP legislation. Therefore, there is no doubt that it can be done.

Question: Hasn't TEFAP helped to reduce surplus dairy inventories?

Answer: Yes, commodities donated under TEFAP authority have helped to reduce surplus dairy inventories. The elimination of TEFAP will not, however, adversely affect this effort since the Department will continue making such commodities available for distribution to the needy under other legal authority.

Food Donation Programs - Budget Proposals

Question: Your explanatory notes fail to explain the reason for elimination of bill language requiring the claims under the Food Donations program to be submitted within 90 days following the month for which reimbursement is requested. Please explain this for the record.

Answer: Since a similiar provision is a part of the authorizing language as contained in Section 311(c)(1)(B) of the Older Americans Act of 1965, as amended, it was deleted.

Question: Is there any reason, other than budget constaints, that the budget is requesting to freeze the Elderly Feeding Program at fiscal year 1985 levels?

Answer: We note that the NPE is one of many programs the Administration has proposed to freeze for one year. NPE is not means-tested and many participants are not low-income. Further the program has grown rapidly; the 1985 funding level is 60 percent above the 1980 spending level.

Question: The Administration's budget requests a freeze in the Elderly Feeding Program. Why does it not also freeze the Needy Family Program?

Answer: The Administration has not sought a freeze in the Needy Family Program since it is a commodity alternative to the Food Stamp Program. Therefore, if a Tribe qualifies for the program, that Tribe is eligible to participate and our budget reflects this entitlement. While growth in the past few years has been fairly substantial, with additional Tribes in Oklahoma being allowed to participate, we do not expect to see large increases in the future since most of the eligible Tribes are now in the program.

Question: Are the participants in the Needy Family Program eligible for other food assistance programs such as food stamps?

Answer: Since the Needy Family Program (NFP) represents a nutritional alternative to the Food Stamp Program, participants are prohibited by law from receiving both commodities and food stamps simultaneously. Given their low-income status, many households in NFP may be eligible for free or reduced-price school lunches, WIC benefits or other programs for the needy.

Question: In your attempts to eliminate duplication in programs, did you consider elimination of the Needy Family Program?

Answer: Because the Needy Family Program overwhelmingly serves an Indian population living on rural reservations, and because participation in the Food Stamp Program is not permitted, the benefits commodities deliver in general do not duplicate any other program. Consequently, there has been no serious consideration of eliminating the program. However, because distribution of commodities in these rural areas tends to be relatively costly, the Department has undertaken an effort to closely examine the budgets submitted by the tribes and States that operate the program to assure the most cost-effective benefit delivery possible. Despite an increasing caseload and new applications from tribes not previously participating in the program, the Department has kept costs to a minimum.

Human Nutrition Information Service

Question: You testified that the Food and Nutrition Board of National Academy of Science (NAS) made recommendations regarding more effective means of obtaining priority uses of dietary data. Please provide the Committee a copy of these recommendations and indicate which ones are being implemented.

Answer: The FNB/NAS supported maintenance of the present system of two separate national surveys to collect dietary data--the USDA's Nationwide Food Consumption Survey (NFCS) and the DHHS' National Health and Nutrition Examination Survey, NHANES.

A list of the major recommendations of the FNB/NAS follows, along with actions planned to implement these recommendations.

1. The two surveys should continue to collect dietary intake data, but that a common identical methodologic core in both surveys' data be developed and implemented. This should include both an identical component of the dietary intake data collection method and the same data base on the composition of foods.

   Action: Both surveys are being continued. Further, the same procedure will be utilized as far as possible. NFCS collects more information in certain areas--for example, food stamps,--and NHANES in others; for example, physical activity. However, core links will be maintained. HNIS is preparing the nutrient data base and food codes for both surveys.

2. The two surveys are better linked through compatible sampling and common population descriptors.

   Action: Compatible sampling plans will be utilized and we plan to report results using common descriptors; for example, sex, age, income, racial and urbanization categories. We plan to use the same nutritional standards to evaluate the nutrient intakes of individuals.

3. NFCS individual dietary intake component and the NHANES should be redesigned as continuous survey processes with continuous data reporting to ensure timely data release and reporting.

Action: NFCS's Continuing Survey of Food Intakes of Individuals (CSFII) will be initiated in April 1985. NHANES staff has worked closely with us in developing this survey.

4. NFCS should continue on a regular, intermittent basis, including a 3-day individual intake component, unless further study demonstrates that some other design is more advantageous.

Action: USDA will initiate the decennial NFCS in 1987, which will include a 3-day individual intake component.

5. A continuous evaluation process for updating of design and methods for the surveys should be established.

Action: The Joint Nutrition Monitoring Evaluation Committee, sponsored by USDA and DHHS is reviewing the two surveys as means of monitoring the nutrition of the population and will make recommendations for improvement of the monitoring system. We are planning to hold periodic data user's conferences, such as those carried out for us by the FNB/NAS in 1983, to continually evaluate our procedures. The two Departments have and will continue to conduct methodological studies to improve the survey procedures. USDA will soon be testing the use of portable terminals in collecting data for NFCS-1987.

In addition to these major recommendations, a number of other recommendations were made upon request. These include recommendations for longer term implementation such as expansion of the National Nutrient Data Bank. More detailed information may be provided to the Committee.

Question: How does your Continuing Survey of the Food Intakes by Individuals differ from the Nationwide Food Consumption Survey? How will it complement the 10-year survey?

Answer: The decennial Nationwide Food Consumption Surveys (NFCS) provide periodic cross-sectional measures or "snapshots" of consumption of foods and nutrients and of nutritional adequacy at both individual and household levels. Information is obtained from probability samples of households and individuals. Samples are selected to permit use of results to estimate food and nutrient consumption for the United States and 4 regions--Northeast, North Central, South and West.

In the household phase, consumption of foods and beverages from home food supplies is reported in the form foods entered the kitchen. Quantity and price measures are for foods in forms found in the marketplace. Nutrient levels reflect the supply of nutrients in household foods and their adequacy in providing Recommended Dietary Allowances (RDA) for persons eating from household supplies.

In the individual food intake phase, information is obtained on food and beverage intakes of individuals at home and away from home during a 3-day survey period. Type and quantities of food are reported as ingested. Nutritional content of foods is derived and related to RDA--nutritional standards--for persons of various sex/age groups.

The decennial Nationwide Food Consumption Surveys provide much data on household and individual food use and nutrient adequacy of diets. However, they have three major limitations which the Continuing Survey of Food Intakes by Individuals (CSFII) was designed to meet. Those limitations are:

-- Information on U.S. diets and their nutrition adequacy is needed more frequently than at 10-year intervals to measure response to changes on economic conditions, food assistance programs and the like.

-- Population groups at risk often are too small to be studied effectively through results from national probability surveys of the U.S. population. Special studies are needed.

-- Three-day food intakes may not represent usual intakes. Longitudinal measures developed over a one-year period, such as used in the CSFII, would be difficult to obtain in the large-scale national surveys because of respondent burden.

In the CSFII, information on food intakes is to be obtained on a continuing basis from a core group of women 19-50 years of age and their children, 1-5 years of age. Results from year-to-year will signal changes, if any, of nutritional concern. The core group is to be augmented from year-to-year by other special population groups where diet quality may be of concern, such as the low-income population, the elderly, teen-age girls, and school-age children.

Question: Your budget request includes a rather large increase for equipment. Please explain.

Answer: The large increase in our budget request for equipment is to purchase about 200 portable terminals for use in collecting data for the household component of the Nationwide Food Consumption Survey-87. The use of portable terminals for data collection will greately reduce the error rates and will substantially increase our ability to make data available to our users on a timely basis.

Question: To what extent is the Department of Health and Human Services participating in this survey?

Answer: The DHHS does not conduct any survey that is comparable to the household phases of the NFCS-87. However, the individual intake data for one day in NHANES is similar to the individual intake data for 3 consecutive days in the decennial NFCS and for the 6 days spread over the year in the Continuing Survey of Food Intake by Individuals.

In order to make the surveys as comparable as possible and still meet the requirements of each of our major data users, the two Departments have worked closely over the past several years and will continue to do so in planning for NFCS-1987 and NHANES III.

In both surveys detailed information will be collected and retained on public use data tapes on variables, such as sex, age, and race of individuals and income, urbanization, and region of households. This will provide for maximum usefulness of data to the two Departments and to other data users. The Departments will strive for consistency of variable definitions in the classification of populations for publication of survey results. We will work together to use the same survey questions and standards where possible and we will both use nutrient data base developed by USDA for translating reported food intake into nutrient intake in both surveys.

Question: Will any of this survey be conducted on a contract basis? To what extent?

Answer: The NFCS-1987, like all HNIS food consumption surveys, is planned in the Department with advice from our primary data users and in consultation with DHHS. All data collection and initial data processing are carried out under contract. Of the $5.8 million increase requested for NFCS-1987 for Fiscal Year 1986, all funds will be utilized for the data collection and initial data processing contract, except for about $400,000 required to purchase portable terminals that will be supplied to the contractors during data collection.

Question: You are requesting $100,000 to conduct a study of the selenium content of foods. Has the Agricultural Research Service or the Food and Drug Administration done any work on this? Will you be duplicating the efforts of others?

Answer: The study of the selenium content of foods will be planned and performed jointly by the Nutrient Data Research Branch (NDRB) of the Human Nutrition Information Service (HNIS) and the Nutrient Composition Laboratory (NCL) of the Agricultural Research Service (ARS). The NDRB has compiled all available data on the selenium content of food and these are being evaluated by NCL staff, preliminary to designing an optimal sampling plan for the study. No other work on determining selenium content in foods is being done or is planned by ARS.

The Total Diet Study, conducted on a continuing basis by the Food and Drug Administration (FDA), includes the measurement of selenium in the limited number of foods selected for that study. Results are supplied to the USDA and have been incorporated into the compilation of selenium data. The Total Diet Study is complementary to the proposed selenium study but not duplicative. FDA has no other program that measures selenium content in foods.

QUESTIONS SUBMITTED BY SENATOR CHILES

Expanded Food and Nutrition Education Program

Question: The infant mortality rate in this country has been reduced by 50 percent in the past twenty years. Most of the decrease in infant deaths can be attributed to technological advances in intensive neonatal care for the high risk, low birth weight baby. Yet the incidence of low birth weight infants is not decreasing.

The institute of medicine has released a study that suggests that the cost of preventing low birth weight, through adequate nutrition and prenatal care, would be less than what we are spending on all these high tech heroics to save high risk babies.

The Department of Agriculture's Extension Service Nutrition Education and Expanded Food Program is eliminated as the need of pregnant women and young children grows. Can you explain?

Answer: All Extension Service earmarked funding which includes the Expanded Food and Nutrition Education Program (EFNEP) is proposed for termination. States may use Smith-Lever formula funds as well as State appropriations to target local problems, including those of EFNEP type audiences. Food and nutrition is a major extension program component, and State and local authorities may wish to maintain educational programs of this kind. They may even wish to target their efforts to the needs of pregnant women and young children. However, this should depend on State and local priorities.

Question: Is there, to your knowledge, any kind of coordinated effort within your agency to focus on the nutritional needs and status of pregnant women and infants and the adequacy of our feeding, education, and research programs to improve their nutrition?

Answer: Yes. Under my direction, a number of offices in the Food and Nutrition Service coordinate administration of the WIC and Commodity Supplemental Food Programs, nutrition education dissemination and research. Like you, we are concerned that the programs seek to decrease the incidence of nutrition-related health problems. Clearly, there are many factors that contribute to the overall health status of pregnant women and infants. These would certainly include substance abuse and teenage pregnancy, as well as maintenance of a sound diet. Nevertheless, because we believe that pregnant women and infants are generally a vulnerable population from the point of view of nutrition, we seek to improve targeting of WIC benefits to pregnant women and infants. Currently, about half the participants are children.

Question: Is there any kind of cooperation between your Agency, and say, the Department of Health and Human Services and other agencies to improve the health and nutritional status of pregnant women and infants?

Answer: Yes. Officials of my Agency often meet with officials of the Department of Health and Human Services or other agencies to discuss joint projects relating to maternal and child nutrition. For example, we are active participants in the Healthy Mothers, Healthy Babies Coalition, which is a joint public/private campaign. But probably more important, at the local and State levels, the same health agencies that administer the WIC Program administer other prenatal, maternal and child health programs. Thus, there is good coordination in delivery of services to the needy.

Question: Do you know, or can you provide for the record, the statistics on how many babies less than 1 year old died of causes related to hunger and inadequate nutrition?

Answer: Of the 42,401 infant deaths in 1982, only 66 (about one-fifth of one percent) had nutritional deficiencies or anemia recorded as the primary cause of death. These deaths were not necessarily hunger-related or caused by a family's lack of resources for providing food to the infant. Inadequate nutrition, severe enough to result in infant death, may also result from child abuse and neglect and congenital diseases. About two thirds of the infant deaths occur among low birthweight babies. Factors associated with low birthweight include teenage pregnancy, smoking, alcohol and other substance abuse during pregnancy, inadequate prenatal care and poor maternal nutrition.

FNS actively undertakes prevention of low birthweight and infant malnutrition through targeting of programs such as WIC. Low income pregnant women and infants at high risk of inadequate nutrition receive high priority for enrollment in the WIC program.

WIC Participation History

Question: Would you give me a month to month breakdown for the past five years of the number of individuals served by the Women, Infants and Children Program (WIC)?

Answer: Listed below is the total national monthly participation for the WIC Program from October 1979 through December 1984.

Fiscal Year 1980	National Total Monthly Participation (In Thousands)
October 1979	1,801
November 1979	1,740
December 1979	1,750
January 1980	1,771
February 1980	1,803
March 1980	1,852
April 1980	1,904
May 1980	1,941
June 1980	1,998
July 1980	2,072
August 1980	2,130
September 1980	2,210
Fiscal Year 1981	
October 1980	2,250
November 1980	2,237
December 1980	2,244
January 1981	2,241
February 1981	2,182
March 1981	2,185
April 1981	2,096
May 1981	2,027
June 1981	1,980
July 1981	1,960
August 1981	1,977
September 1981	2,037
Fiscal Year 1982	
October 1981	2,017
November 1981	2,020
December 1981	2,035
January 1982	2,043
February 1982	2,074
March 1982	2,167

Fiscal Year 1982--Continued	National Total Monthly Participation (In Thousands)
April 1982	2,206
May 1982	2,243
June 1982	2,311
July 1982	2,346
August 1982	2,384
September 1982	2,421
Fiscal Year 1983	
October 1982	2,419
November 1982	2,422
December 1982	2,404
January 1983	2,410
February 1983	2,392
March 1983	2,417
April 1983	2,428
May 1983	2,496
June 1983	2,596
July 1983	2,676
August 1983	2,821
September 1983	2,964
Fiscal Year 1984 (Preliminary)	
October 1983	2,996
November 1983	3,001
December 1983	2,982
January 1984	3,039
February 1984	3,044
March 1984	3,073
April 1984	3,066
May 1984	3,080
June 1984	3,069
July 1984	3,064
August 1984	3,085
September 1984	3,031
Fiscal Year 1985 (Preliminary)	
October 1984	3,083
November 1984	3,100
December 1984	3,071

Question: Are these individuals receiving the same level of assistance today as they have in the past?

Answer: The current regulatory provisions governing types and quantities of supplemental foods authorized for participants were published November 12, 1980. They have not been changed since that time. State agencies may periodically adjust food packages for participants based on their nutritional needs, however. We believe that participants are receiving the same program benefits which they have received in the past.

QUESTIONS SUBMITTED BY SENATOR BUMPERS

Child Nutrition Programs--Budget Proposals

Question: Do you anticipate an increase in the price of reduced price and paid meals as a result of the proposed program changes?

Answer: Possible price changes in reduced price and paid meals involve separate factors. For reduced price meals, schools are not permitted to charge more than 40 cents for a lunch or 30 cents for a breakfast. Current average prices are estimated to be several cents less than these maximums. The only budget proposal that might affect these prices is the one year freeze in cost of living adjustments (COLA) in reduced price meal subsidies. Depending upon whether State and local agencies increase their own contributions to the small extent that would be needed to offset this freeze, participants may need to pay closer to the maximum allowable prices for their reduced-price meals.

For paid meals, the budget proposal would eliminate all Federal cash and entitlement commodity subsidies. The average cost of a school lunch for a child above 185 percent of the poverty level would rise to $1.07 from the current 82 cents if there were no State or local funding increase to offset the discontinuation of Federal support.

Question: How do you predict the price increases will affect participation in the lunch program?

Answer: That is difficult to predict. It depends, in part, on the availability of State and local revenues which might substitute for the loss of Federal revenues. If State and local governments devote resources to the School Lunch Program, it will minimize price increases and lessen the impact on participation.

However, if no State or local revenues are provided for this purpose, average lunch prices will rise from about 82 cents to $1.07 per meal. In the first few months after the price increase, participation may decline. After that, I think parents and students will recognize that a nutritious school lunch for $1.07 is still quite a bargain compared to other alternative lunches. Families of four in the paid category earned an average of $33,000 in 1983; I think these families will decide that for just 25 cents more a day their children are receiving a tasty and nutritional lunch that can't be duplicated elsewhere for this price.

Question: Do you think some school districts will drop out of the school lunch program in FY 86? (If a school drops out of the program won't low income as well as middle and upper income students be affected?)

Answer: Only 20 percent of schools serve 80 percent or more of their lunches in the paid category. Logically, these are the schools which would be most affected by the elimination of the paid subsidy. However, because subsidies for free and reduced-price lunches are so much higher than the subsidy for a paid lunch, even a school with 80 percent paid participants would still receive two-thirds of its total Federal reimbursement under our proposal. We believe that most school districts, after reviewing the situation, will remain in the program.

Question: Do you think some family day care providers will choose to cease participation rather than meet the paperwork demands created by a means test for their children? Isn't this at odds with the Administration's policy of trying to eliminate government bureaucracy rather than creating it?

Answer: Actually, the proposal would reinstate a means test that was dropped in 1980, and the proposed means test would be administratively simple. It involves only one income eligibility decision and is designed to minimize paperwork for sponsors. At this time, providers themselves must meet income guidelines if their own children participate in the program; therefore, a means test will not impose new procedures on all providers or sponsors.

The Administration's policy has been to eliminate government regulation where it is overlapping or unnecessarily intrusive. A means test in the Family Day Care Homes program would be a simple way of ensuring that Federal subsidies are reserved for the needy in our society without disrupting the provision of child care.

Food Stamp Program

Question: Do you have any evidence from the workfare demonstration projects that the workfare requirement for food stamp recipients is cost effective?

Answer: The most complete information comes from the first set of seven workfare projects that operated from 1979 to 1980. Evidence from the first set of projects indicates that workfare increased the rate of regular employment among female referrals and reduced food stamp participation among both males and females referred to workfare. The value of program benefits derived from increased tax payments, reduced Food Stamp Program participation and the work performed was nearly equal to the extra adminstrative costs associated with workfare.

We expect the evaluation of the cost effectiveness of the second much larger demonstration of workfare by 14 projects to show increased cost effectiveness due to better administration based on the lessons of the first set of demonstrations.

The Administration's proposal is likely to result in an even more cost effective program. Important changes from the demonstration are elimination of the mandatory initial job search period and a stronger sanction. In the demonstrations, participants were not eligible for workfare until after completing a mandatory 30-day job search. In the current optional program, local areas have an option to postpone workfare eligibility until completion of a 30-day job search. Under the Administration's proposal, CWEP eligibility will begin at the time of certification. The penalty for noncompliance is also stronger. In the demonstrations, noncompliant households were disqualified for 30 days. In both the current optional program and the proposed mandatory program, the disqualification period is 60 days.

SUBCOMMITTEE RECESS

Senator COCHRAN. This brings this hearing to a close. We will convene again on Tuesday in this same room at 10 a.m. to hear from representatives of the Agricultural Research Service, the Cooperative State Research Service, the Extension Service, and the National Agricultural Library. Until then the hearing will stand in recess.

[Whereupon, at 11:35 a.m., Thursday, March 7, the subcommittee was recessed, to reconvene at 10 a.m., Tuesday, March 12.]

AGRICULTURE, RURAL DEVELOPMENT, AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 1986

TUESDAY, MARCH 12, 1985

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, DC.

The subcommittee met at 10 a.m., in room SD-124, Dirksen Senate Office Building, Hon. Thad Cochran (chairman) presiding.

Present: Senators Cochran, Kasten, Andrews, Sasser, Chiles, and Burdick.

DEPARTMENT OF AGRICULTURE

SCIENCE AND EDUCATION

STATEMENTS OF:

ORVILLE G. BENTLEY, ASSISTANT SECRETARY, SCIENCE AND EDUCATION

TERRY B. KINNEY, JR., ADMINISTRATOR, AGRICULTURAL RESEARCH SERVICE

JOHN PATRICK JORDAN, ADMINISTRATOR, COOPERATIVE STATE RESEARCH SERVICE

MARY NELL GREENWOOD, ADMINISTRATOR, EXTENSION SERVICE

JOSEPH H. HOWARD, DIRECTOR, NATIONAL AGRICULTURAL LIBRARY

ACCOMPANIED BY EDGAR L. KENDRICK, ADMINISTRATOR, OFFICE OF GRANTS AND PROGRAM SYSTEMS

INTRODUCTION OF WITNESSES

Senator COCHRAN. The subcommittee will please come to order. This morning we will be hearing from witnesses on behalf of the administration's budget requests for agricultural research, extension and teaching. We will focus on four agencies within the Department: The Agricultural Research Service [ARS]; the Cooperative State Research Service [CSRS]; the Extension Service; and the National Agricultural Library.

All of these activities come under the jurisdiction of Dr. Orville G. Bentley, the Assistant Secretary for Science and Education.

Accompanying Dr. Bentley this morning are Dr. Terry Kinney, Administrator of ARS; Dr. John Patrick Jordan, Administrator of CSRS; Dr. Mary Nell Greenwood, Administrator of the Extension Service; Joseph Howard, Director of the National Agricultural Library; and Bob Sherman, a USDA Budget Officer.

We have your prepared statements which were furnished to the committee, and we appreciate your doing that. We will include them in their entirety in the record.

Dr. Bentley, we welcome you and your colleagues to the subcommittee. We invite you to proceed as you wish, to introduce your colleagues or make whatever statements or observations that you would care to make at this point. You may proceed.

DR. BENTLEY'S OPENING REMARKS

Dr. BENTLEY. Mr. Chairman, we appreciate the opportunity to be here. You have already referred to my colleagues by name but let me present them at this time. On my right, Dr. Greenwood from the Extension Service; Dr. Howard of the National Agricultural Library; Mr. Sherman of the Budget and Planning Office. On my left is Dr. Kinney, of ARS; Dr. Jordan, CSRS; and on the end, Dr. Kendrick, with the Office of Grants and Program Systems.

We are pleased to be here this morning. I would like to make a statement and then if it is agreeable with the chairman, we will make our presentations. Of course, we would appreciate the opportunity to answer questions at any time.

Senator COCHRAN. That will be fine. I will withhold any questions until all the statements have been presented. Thank you.

RESPONSIVENESS OF RESEARCH

Dr. BENTLEY. I think everyone would agree that these are trying times for American agriculture. Some have said that technology has contributed to the economic problems of American farmers. There are those who yearn for "the good old days" when life was simpler and perhaps less complicated. But the farm world is much smaller and less easy to deal with today.

The incomes of many farmers are tied to foreign policies. Decisions made in Moscow or Beijing or Tokyo, as well as Washington, impact on the American farmer. The American system of agricultural research and education has been a leading factor in the Nation's ability to maintain a bountiful and safe supply of food, fiber, and forest products.

Research, like the rest of agriculture, must also change and adapt. We must continue to develop the ability to respond rapidly to immediate short-term needs and crises and to meet the challenges of the future as well.

We have responded effectively in recent years to serious problems, ranging from the Mediterranean fruit fly infestation to the avian influenza outbreak to the serious outbreak of citrus canker in the State of Florida, in which early detection of the bacteria allowed regulatory officials to respond promptly, thus averting an even more serious crisis.

Now, we are beginning to use new technologies to attack long-standing problems. One development, which is rapidly emerging, is the expanded use of biological controls to eradicate harmful insects. This technology will result in the savings of millions of dollars for our farmers.

BUDGET PROPOSAL

Mr. Chairman, the budget proposal we have before you will allow USDA scientists, extension personnel, and those who work at the State agricultural experiment stations and colleges and universities, to focus on current issues in agriculture, such as farm profitability and water development, and to address future needs.

ELIMINATION OF PROGRAMS

This proposed budget for USDA's science and education agencies reflects an awareness of the need for fiscal restraint. You will notice that we have proposed the elimination of certain programs. In eliminating these programs, we are not contending that such programs have not been useful or effective in the past.

The largest single program being proposed for elimination is the Expanded Food and Nutrition Education Program, or EFNEP, which appears in the budget of the Extension Service. This program, which has a current budget of $60.3 million, has been successful in reaching low income adult and youth clientele, resulting in better dietary practices and increased nutrition knowledge.

We have maintained the fiscal integrity of the formula funding programs, such as Smith-Lever. The States, in their discretion, can direct other Federal, State, and county funds for food and nutrition programs.

We are also proposing to eliminate other programs of the Extension Service which, in our opinion, are not as essential as Federal programs as they once were. We have also proposed the elimination of the Special Grant Program in the Cooperative State Research Service budget.

Like many of you, I've grown to appreciate these programs over the years. But the present budgetary constraints compel us to take a hard look at such programs and make hard decisions.

RESEARCH ACCOMPLISHMENTS

I should like to turn for a few moments to some of the things we have done within the science and education agencies since I last appeared before you. As you had requested, we are now transmitting to you a quarterly report on research accomplishments.

Dr. Kinney will be talking to you in more detail about these reports. Some of the reports contain information now considered to be almost routine. But in analyzing what has taken place, one can stand back and be impressed.

Just as one example, one item in a recent report noted that ARS has used biotechnology to develop a diagnostic test for trichinosis of swine, without the slaughter of the animal. This is an accomplishment that will save the pork industry millions of dollars and help end the problem of trichinosis in this country.

Mr. Chairman, this has been a productive year in agricultural research. We have made progress in the eradication of the boll weevil.

We have developed new ways of controlling leafy spurge. We have increased our knowledge of human nutrition and diets. We will continue to keep you informed of other new and exciting developments.

While we are proud of the work of the scientists of the Agricultural Research Service, we are also very proud of the fine research being done cooperatively at our Nation's land grant colleges and universities.

Dr. Jordan, Administrator of the CSRS, will be detailing accomplishments in research at these institutions. There have been other activities within the last year that merit comment.

With the support of Secretary Block, we conducted a national forum on new uses for agricultural products. As an outgrowth of that forum, an industry-sponsored task force is being assembled to work with USDA in the development of new uses for agricultural and forest products such as industrial oils, lubricants, waxes, plastics, and petrochemical replacements, as well as products which can be produced from agricultural plants.

In 1984, the Human Nutrition Board of Scientific Counselors was formally organized and met to bring together scientist representatives of industry, universities, and government to address major policy issues of nutrition.

Three task groups were formed to examine food composition, implications of dietary guidelines, and recommended daily allowances, or RDA, and to seek solutions to nutritional problems through changes in the agricultural food system.

BIOTECHNOLOGY

I would also like to provide you with an update on our explanation of the biotechnology program. Through the Cooperative State Research Service and the Office of Grants and Program Systems, we have developed and published the criteria for the distribution of the appropriated funds.

When the March 1 deadline for receiving applications arrived, we had received more than 600 requests. The bulk of these proposals are well done and will, in our estimation, begin to produce those results which we had pledged to you one year ago.

We are excited about and remain committed to this new initiative, and we are asking you to continue your support in fiscal year 1986. Mr. Chairman, CSRS is committed to giving the best output per research dollar invested through cooperative efforts of the State Agricultural Experiment Station system, ARS, and other agricultural research organizations.

BUDGET REQUEST

Our budget request for CSRS will continue strong support for the State-Federal partnership in food and agricultural research, and thereby provide the flexibility for the support of research on the highest priority problems.

The Competitive Research Grants Program will continue to support basic research in biotechnology, animal science and pest science. The

National Agricultural Library has the smallest budget of the four science and education agencies, but its mission remains a very high priority for the Department.

With a minor budget reduction, it will continue to provide those services which are necessary. Cooperative agreements with other agencies and the private sector have allowed the NAL to provide valuable services to researchers, growers, retailers, and consumers. NAL Administrator, Joe Howard, will provide you with more specific information.

COOPERATION WITH OTHER FEDERAL AGENCIES

In conclusion, I would like to highlight the improved working relationships that we have developed over the last few years with our Federal counterparts in science and education. I might add that this I consider one of the more important functions of my office.

Here are a few items that will indicate this kind of progress: Conferring with officials of the Food and Drug Administration and the National Institutes of Health to ensure that we are working together in a coordinated effort to respond effectively to diet and health issues.

Another example is our working with the Office of Science and Technology Policy, FDA, NIH, and EPA to come up with a standard set of regulatory jurisdictions over products resulting from biotechnology. I might add here that Dr. J. Keyworth, the President's Science Advisor has been much involved and has been the source of a great deal of advice and help in our development of research programs in the food and agricultural sciences.

In cooperation with seven different offices and agencies of the Federal Government, we prepared a paper entitled "Research Background Paper for 1985 Farm Legislation." This paper demonstrates the continuing need for a Federal presence in agricultural research and discusses how related programs are being coordinated to contain greater efficiency and effectiveness.

These and other coordination efforts require a lot of work and time on my part and those of the administrators seated here. However, the payoff is worth it many times over, in my opinion.

In addition to less duplication of effort and reduced turf battles, agriculture and forestry research is being recognized as a legitimate scientific pursuit that strengthens the Nation's whole economy.

There is a strong scientist-client connection and the decentralized character of the performing units allows for quick responses to changing issues.

Mr. Chairman, this concludes my statement. I would be glad to answer questions at any time you may wish to present them. If it is agreeable, could we move to my colleagues?

Senator COCHRAN. That will be fine. We would like to hear from your colleagues now. Thank you, Dr. Bentley. Dr. Kinney.

Agricultural Research Service

Dr. **Kinney**. Thank you, Mr. Chairman. Thank you, Dr. Bentley. Mr. Chairman, I am pleased, once again, to have the opportunity to appear before you and this committee to discuss the ARS budget request for 1986 and report on progress that we have made. I want to take only 3 or 4 minutes to make some comments. My complete statement will be submitted for the record.

[Dr. Kinney's prepared statement follows:]

STATEMENT OF DR. TERRY B. KINNEY, JR.

Mr. Chairman and members of the Committee, I am pleased to once again have the opportunity to appear before you to present the budget request for the Agricultural Research Service (ARS) for 1986 and to report on progress that we have made on research supported by previous appropriations. I would like to present my testimony in three parts starting with a description of our budget request for FY 1986. Then, I would like to spend a few minutes talking about ARS responsibilities and how we are responding to them in this time of limited resources.

FY 1986 Budget Request

Mr. Chairman, the ARS budget recommendation for 1986 reflects a net decrease of $1.7 million and is comprised of $5.5 million in increases for selected high-priority research projects and $7.2 million in decreases resulting from planned management reductions and changes in pay rates. The ARS budget also proposes a rescission of certain 1984 and 1985 construction projects amounting to $37.9 million.

The $5.5 million in 1986 research program increases are primarily for the following high-priority projects:

- Soil and Water Conservation. The 1986 proposed funding level of $59.6 million includes a $1 million increase to improve the technologies for natural resource inventories and to better understand chemical movement in ground water.
- Plant Science. The 1986 proposed funding level of $188.6 million includes a $3 million increase for the following: (1) acquisition, maintenance, evaluation and enhancement of germplasm, (2) assume responsibility for the Germplasm Resources grant currently funded by the Cooperative State Research Service to support the clonal repository network, (3) increase support for the new gene expression center in Albany, California, and (4) support for the Caribbean Basin Initiative.
- Animal Science. The 1986 funding level of $88.2 million includes a $600 thousand increase for support of the Animal and Plant Health Inspection Service animal protection programs.

- Commodity Conversion and Delivery. The 1986 level of $90.3 million includes a $500 thousand increase to expand the search for alternative quarantine treatments to replace the use of ethylene dibromide (EDB) and other fumigants on export crops.

The $37.9 million proposed rescission would eliminate construction of unnecessary new research facilities. The facilities would add at least 80 scientist years of research capacity, even though the system has been operating well below capacity for years. The long-range annual operating costs for these facilities is estimated to be $16 million and could only be met by an undesirable diversion of existing resources.

Responsibilities

Now, Mr. Chairman, I would like to spend a brief time outlining what I see as the responsibilities of the Agricultural Research Service. These are:

- To provide leadership and direction for the Nation's food and agricultural science system.
- To conduct research that will ensure the long-term efficiency in performance of the Nation's agriculture production and marketing systems.
- To conduct research in support of Departmental Action and Regulatory functions.
- To conduct research and technology-transfer programs that result in broad societal benefits and significant economic gain to the Nation.
- To undertake high-priority research in the national interest to ensure perpetually an adequate supply of high-quality food and fiber for the American people and for export.

Mr. Chairman, ARS is a problem-solving research organization. Our research is responsive to ongoing and immediate agricultural problems confronting the Nation's farmers (citrus canker, brucellosis, blue tongue, weeds, African bees, and others). But our research is also far ranging enough to provide new scientific solutions to major agricultural problems such as soil erosion and other environmental factors that reduce efficiency in agricultural production and have yet to be solved with present technology.

Research must encompass national goals identified for American agriculture:

- Soil and water conservation.
- Plant productivity.
- Animal productivity.
- Improved commodity conversion and use.
- Nutritional soundness.
- Development of agricultural systems that result in production efficiency and sustainability.

The primary role of the Agricultural Research Service is to solve high-priority national problems for agriculture. Scientists in the Agricultural Research Service have had, and continue to have, for their use the newest technologies and equipment that are available and appropriate.

Important new research components and experimental techniques, now generally referred to as biotechnology, are used by ARS scientists in modern laboratories as tools to further enhance research progress in fields as diverse as animal reproduction and growth to pest control in crop production.

These new scientific tools are used at many locations throughout ARS. We do not see the need nor do we think it appropriate for the Agricultural Research Service to establish a number of biotechnology centers. These new tools of biotechnology are being used at many locations throughout ARS where scientists are working on specific problems and where these tools can appropriately contribute to enhancing the quality and progress of the research.

Research Accomplishments

We have made a lot of progress this past year in several areas of research. I want to highlight just a few of these accomplishments that are contributing in a major way to the solution of several critical agricultural problems.

Boll Weevil Eradication. Chemical signals or pheromones of boll weevils have been isolated, identified, and synthesized and early detection and treatment of this pest is now possible. Use of this technology enables cotton farmers in North and South Carolina to reduce production costs by over $30 per acre.

Citrus Canker. Early and definitive detection and identification of the causative bacterium in the Florida outbreak allowed effective control and containment by the regulatory officials.

Trichinosis. Biotechnology tools were used in the development of a diagnostic test for trichinosis in swine without slaughter of the animals, thus saving the pork industry millions of dollars and paving the way for eradication in the U.S.

Resource Conservation. Conservation tillage systems continued to be improved, further reducing production costs and improving the control of erosion in many areas. Soil erosion was reduced 70 percent under conservation tillage as compared with conventional tillage in 11 years of testing in Mississippi. Slot mulching has virtually halted soil erosion on winter wheat fields in the Palouse hills of the Pacific Northwest.

Alternatives to EDB. Emergency development of physical treatments - hot and cold dips - has allowed the continued marketing and exporting of citrus, papaya, and other fruits. Further improvements are underway.

Plant Quarantine Inspection. A new instrument has been designed and built that detects fruit and other plant material in traveler's luggage. This equipment will be used at airports and other points of entry to reduce the chances of accidental introduction of exotic agricultural pests.

Brucellosis. Several new vaccines developed with biotechnology tools are being field tested. These offer considerable promise of providing effective immunity to this disease in cattle.

Leafy Spurge. New ways of using and applying herbicides have reduced costs and improved control. Two promising insect biocontrol agents are now being field tested.

Human Nutrition. Diet relationships to health are being continuously refined, i.e., potassium/blood pressure interrelationships, polyunsaturated fats and blood pressure, and fiber/cholesterol interrelationships have been further defined.

Soybean Productivity. New varieties resistant to lodging and disease were released. New rhizobium strains to improve nitrogen fixation and new irrigation technology have reduced costs and dramatically increased yields.

There are many other examples of accomplishments that contribute to the progress of science and agriculture and I would like to submit a copy of "Research Progress in 1984" for the record.

Finally, Mr. Chairman, I believe in a broad sense that agricultural research is the highest application of our scientific genius. By using science to feed a hungry world's burgeoning population, we are also using science to endow human lives--whole populations--with health, hope, and dignity.

Responding to Challenges

The general public, Congress, and user groups continuously challenge us to develop technologies to solve important problems. The needs are many, expectations are great, and resources limited. We cannot address all the needs at the same time but we are doing the best we can. We systematically and periodically evaluate the needs and make judgments and decisions on what research we can do. The ARS central management group annually reviews every project to make sure the hoped-for results are worth the investment of time and money and whether the objective is still of the highest priority. Such decisions frequently mean moving money and people around--an upheaval is never very popular with the people concerned. But this kind of central management and control is essential in a time of tight budgets and it is always appropriate in a public agency using public funds.

The Agricultural Research Service is the principal scientific research agency in the U.S. Department of Agriculture. Our facilities are located strategically across the major agricultural and range-land ecosystems and climate zones of the United States. ARS has the unique ability to bring research expertise to bear on the same national problem in several different geographic locations. Over 8,000 people are employed by ARS and about one-third of this number are scientists and engineers working in research. The remainder provide technical and administrative support. Since 1981, a successful concerted effort has been made to reduce both funds and personnel engaged in administrative and program management activities. One layer of overhead has been eliminated and management responsibility centralized at Headquarters. These actions have resulted in the redirection of more than $12 million from management to high-priority research programs and improved program direction and accountability. I'll submit for the record documentation of programs benefitting from these management savings. Centralizing program management at Headquarters has also provided the flexibility and means to respond quickly to changing priorities and emerging situations.

You, Mr. Chairman, and this Committee, have steadfastly supported the Agricultural Research Service efforts in the past and for that support we are grateful. We seek your continued support, encouragement, and guidance in meeting future responsibilities. This concludes my prepared remarks. I will be pleased to answer questions you may have.

PROGRESS IN ARS PROGRAMS

Dr. KINNEY. We are requesting an increase of $5.5 million to give additional attention to specific high priority research in soil and water conservation, plant and animal sciences and commodity conversion and delivery.

Mr. Chairman, during the past 2 or 3 years we have restructured our organization to improve the efficiency with which we plan, conduct, monitor, and manage our research to solve problems. Many of our actions have been in direct response to questions or suggestions made by the Congress.

If it pleases the chairman, I will submit a summary of these actions that we have taken with respect to our organizational structure and management.

[The information follows:]

MANAGEMENT INITIATIVES

Mr. Chairman, last year you raised significant concerns about the management of the Agricultural Research Service [ARS]. In the past year, I have dealt forthrightly with those concerns and also completed initiatives we began over 2 years ago with the publication of our ARS program plan. In short, Mr. Chairman, we have fully implemented the reorganization of ARS.

Today's ARS is a lean organization. One layer of program and administrative management has been abolished—the regional offices. Eleven area directors report directly to me instead of 25 reporting to four regional administrators. ARS has allocated over 300 positions and $12 million to high-priority research projects which were saved from overhead costs. ARS overhead costs have gone from 14 percent to 10 percent. Last October, we provided to your staff a list of recurring increases in project funding totaling $14 million. These increases are being supported by the reduction in overhead and other funding adjustments.

ARS is now a centrally managed organization. The National Program Staff [NPS] is responsible to me for research planning, priority setting, program evaluation, and allocation of resources. In carrying out these responsibilities, they interface with the area directors and others, including university cooperators, action agencies, and private sector groups to develop credible recommendations.

The 6-Year Implementation Plan is being implemented through Annual Resource Management Plans prepared and submitted by our research leaders. Each of these plans is based on the allocation of funds by my office for specific projects. Last year, I personally reviewed every plan, made decisions regarding program importance, and made adjustments in funding levels where necessary to provide adequate support to productive research units. Shifts in priorities, funds, or programs are approved by me after review and recommendation by NPS. This includes all appropriated funds, reimbursements, and discretionary funds derived from salary lapse or other sources.

Mr. Chairman, today's ARS is an organization which is accountable and one which works. Budget allocations are made directly to specific research projects. Every unit is held accountable for the use of those funds which are allocated against their approved Annual Resource Management Plan. Research scientists are accountable for the use of budgeted funds against specific research projects. With the changes mentioned above, we were able to recruit and hire 140 scientists last year, the highest number in several years, and reduce the recruitment time from about 18 months to a little over 4 months. These improvements in personnel administration have enabled us to increase the number of scientists engaged in hands-on research despite a reduction in the overall employment ceiling. Additionally, we continued to emphasize postdoctoral opportunities in ARS. The ARS postdoctoral program will support 200 postdoctoral scientists during fiscal year 1985. Postdoctoral appointments are made at the GS-11 level which enables us to be very competitive in attracting the brightest and best trained young people available. The recruitment process to hire postdoctorals has been streamlined and these people can be brought on board in a matter of days which helps in responding to special situations.

Another important improvement resulted from the establishment of an Office of Cooperative Interactions to carry out ARS responsibilities for technology transfer, patent activities, and interactions with cooperators, government agencies, and private industry. Your staff is now provided a list of ARS research accomplishments on a quarterly basis.

QUARTERLY REPORTS

Dr. KINNEY. The Agricultural Research Service is a problem-solving agency. I want to simply mention a few of our accomplishments during the past year. I would also like to submit, for the record, copies of the quarterly reports that have been submitted to the Congress during the past year. Dr. Bentley alluded to these.

[The information follows:]

QUARTERLY REPORT ON SELECTED RESEARCH PROJECTS OF THE AGRICULTURAL RESEARCH SERVICE

April 1 to June 30, 1984

INSECT AND WEED CONTROL RESEARCH

A SPRAY-ON BIRTH CONTROL FOR COCKROACHES called hydropene is the latest chemical weapon to battle this pest. Manufactured by a commercial firm, hydropene was found in tests to prevent the birth of cockroach offspring. ARS reports that a single spraying throughout a 100-unit apartment complex in Gainesville, Florida, had cut the roach population 95 percent eight months later.

A COOPERATIVE RESEARCH AGREEMENT was signed with Brazil in April to find new biological weapons to control the imported red fire ant, which now infests 230 million acres in nine Southern states.

ONE PROMISING CONTROL FOR FIRE ANTS is a synthetic hormone that mimics the pest's juvenile hormone. Researchers baited ant colonies with soybean oil and corn grit laced with tiny amounts of hormone. Worker ants carried the lethal bait into the colonies, where the food was regurgitated and fed to the queen and to immature ants. Under the hormone's influence, immature ants developed into drones instead of workers. Without workers to gather food and tend the broods, the fire ant colonies soon crumbled and eventually disappeared. A chemical company is now manufacturing the hormone.

INSECT NEUROCHEMISTRY is a science that studies the insect's brain and nervous system to learn what causes behavior. If the chemistry in the brain that dictates behavior can be disrupted, the resulting false signals can halt molting, upset mating, realign hormones or prompt other fatal reactions. Current research is trying to interrupt the production of sex attractants in the corn earworm moth...Isolate hormones in the housefly to learn what effect they have on specific cells in the fly's body...Isolate hormones in the stable fly that control the insect's muscle contractions. As research unlocks the intricacies of the insect brain, this scientific work will lead to a new class of safer insecticides which alter the behavior of insect pests without harming other living things.

VIRUS LETHAL TO A WHOLE CLAN OF INSECT PESTS, including cotton budworms and bollworms, can be sprayed on cotton plants and will kill caterpillars soon after they attack the boll. After death, a caterpillar corpse disintegrates when touched, releasing billions more virus particles that are deadly to live caterpillars nearby. The developer of the virus reports that "the potential for biological control agents has scarcely been tapped."

A FIRST-OF-ITS-KIND PROCESS for encapsulating biological or chemical herbicides in water-absorbent gels made from algae has been developed by ARS scientists. The gels contain the herbicides for controlled release. Although still too expensive for commercial use, the process will be useful to researchers attempting to solve weed-control problems.

A CHEMICAL SCENT MAY SOON ATTRACT armies of "friendly" spined soldier bugs to a single field, where they can fed on a wide variety of crop-destroying insects. The soldier bugs feed on insect larvae, so pests are killed at the stage when they inflict the most damage to crops. After the pests are destroyed, the scent, called a pheromone, could be used to lure the soldier bugs to another field to feed on more insects, while any pests remaining in the first field are mopped up with pesticides.

TESTS SHOW THAT COCKROACHES and mosquitoes are in fact not repelled by ultrasonic gadgets commonly sold through the mail, nor do they keep the mosquitoes from biting. The U.S. Postal Service asked ARS scientists to check the effectiveness of these products.

NEW GUIDELINES FOR MATCHING application rates of commonly used herbicides to soil properties will help farmers adjust amounts of chemicals to soil changes resulting from changes in tillage practices.

CROP RESEARCH

APPLYING INFINITESIMAL AMOUNTS of the hormone brassinolide to young plants speeds up growth and maturation of several fruits and vegetables by as much as 2 to 4 weeks. In research trials, the steroid increased potato yields 24 percent; radish and lettuce yields, 15 to 30 percent, and bean and pepper yields, 6 to 7 percent. It also proved effective on soybeans. Once commercial companies develop large-scale methods for synthesizing brassinosteroids, their use could become commonplace.

APPLICATION OF A CHEMICAL BIOREGULATOR known as DCPTA to young soybean plants causes significant increases in oil and protein content of the soybean. In trials in California, soybean yields also increased by as much as one third.

COTTON PLANTS THAT NEED LESS WATER may result from genes borrowed from a drought-resistant cotton plant found growing wild in Mexico. The plant has a root system that carries more water up through the plant to leaf surfaces, and its leaf pores have a better mechanism for regulating the intake of airborne carbon and release of water.

A NEW CARROT known as 'A Plus' is a superior source of Vitamin A, packing 60 percent more carotene than varieties now on the market. The carrot also has good flavor. Several companies have begun limited production of the seed.

"SWEET SANDWICH" IS A NEW ONION that, unlike other onions, becomes milder in flavor while in storage at low temperatures. In commercial and home garden trials in New York State, the sweet onion outproduced 15 other varieties at 1,615 bushels per acre.

IMPORTANT PLANT BREEDING LINES have been released to public and private researchers...Three new kinds of soybeans, all noncommercial, have been developed by ARS and North Carolina State scientists. Breeders can use these germplasm lines to improve insect and nematode resistance in soybean cultivars being designed for use by farmers. They also can improve yields...Five sunflower germplasm sources with resistance to all four North American races of rust have been released for use in sunflower breeding and hybrid seed programs by ARS and the North Dakota Agricultural Experiment Station...Three new kinds of sweet potatoes have been developed by ARS and university researchers in Texas and South Carolina...Eight new groups of winter-hardy alfalfa germplasm have been released by ARS and cooperating state agricultural experiment stations. All groups have desired multiple disease and insect resistance.

INVESTMENTS IN RESEARCH on wheat breeding by ARS and Purdue University have paid off by increasing wheat production in soft red winter wheat-growing regions by over 1 billion bushels since 1946.

GROUND WAS BROKEN MAY 19 for the new South Central Agricultural Research Laboratory, at Lane, Oklahoma. When completed, the laboratory will focus on production, harvesting, and marketing systems for horticultural crops important to the South Central region.

ANIMAL RESEARCH

A NEW BLOOD TEST proved over 90 percent accurate in detecting trichinosis in live pigs. A result of biotechnology research, the test delivers a higher level of accuracy than achieved before without slaughtering the animal.

RED BLOOD CELLS ENCAPSULATE DRUGS in a new slow-release system for prolonging the effectiveness of drugs in animals. Encapsulating a drug can potentially lower the required dosage and target it selectively to specific organs where it is needed. Animal systems are models for the human system.

A GOAT VIRUS DISCOVERY could shed light on the cause of rheumatoid arthritis in humans. Caprine arthritis-encephalitis (CAE) virus is the only virus proven to cause chronic arthritis in mammals. Now that the goat disease has been identified, it is being studied as an animal model for the human ailment.

LIVER SAMPLING FOR BIOPSY has been developed that permits removing large liver samples from live animals with little loss of blood. The procedure may find application in human medicine--possibly to stop bleeding of persons with livers damaged in serious accidents.

SKIN CANCER GROWTH IS INHIBITED by the use of an insect growth regulator, used routinely to control agricultural pests. In tests, diflubenzuron stopped the growth of malignant melanoma and skin carcinoma tumors in mice and reduced tumor size as much as 22 percent in one day.

RESTRICTING FEED DURING PREGNANCY affects progeny. Pigs from gilts in early-restricted diets had less backfat, less fat around the kidneys, smaller fat cells, and larger trimmed hams and loins than adequately fed gilts.

EARLY WARNING SIGNAL FOR ACUTE KIDNEY DYSFUNCTION can be obtained from the blood of sheep and swine. Animal red blood cells are interconnected by "bridges," which give advanced warning of kidney damage. The research raises the question of whether humans may exhibit these "bridges" at the onset of kidney failure, as well as during the progression of the disease. If proven applicable, these findings may be used as a quick diagnostic tool for early detection of diseased kidneys in humans.

NARROWLEAF SUMPWEED has been identified as almost certainly the cause of spring cattle abortions along the Eastern Seaboard from Nova Scotia to Texas. Although scientists have not yet demonstrated the cause-and-effect relationship between sumpweed and bovine abortions, they have shown that the weed causes changes in the reproductive systems of cattle. Livestock producers will benefit greatly by taking preventive measures.

RESOURCE AND ENVIRONMENTAL RESEARCH

STATE-OF-THE-ART TECHNOLOGIES--from computers to lasers to solar power--are being linked together to deliver automatically just enough water to thirsty plants. A fully equipped moving trickle-irrigation system also can apply herbicides, fertilizers, and mulch to plants as needed. Growers will be able to stretch the use of water, including slightly saline water, for irrigation.

"PAIRED-ROW" PLANTING, a new way of managing no-till small grains, when combined with deep banding of fertilizers, increases early growth of wheat and offers new possibilities for more efficient use of fertilizers and better control of weeds.

SLOT MULCHING VIRTUALLY HALTED SOIL EROSION in tests on winter wheat fields in the Palouse, exploiting the region's exceptionally abundant crop residues. The emerging conservation system relies on packing crop residues into slots dug 4 inches wide, 10 inches deep, and spaced 12 to 24 feet apart across the field's contour. The system enables runoff water to penetrate into frozen soil rather than washing it away. Residues keep the slot open and insulated throughout the region's typical freezing and thawing cycles.

A MOBILE UNIT THAT DETOXIFIES PESTICIDE WASTES on site simplifies the problems of safe disposal in remote areas where transportation is difficult or expensive. It combines use of high-energy ultraviolet light and oxygen to partially biodegrade such pesticides as 2,4-D, atrazine, and paraquat before the waste goes into disposal tanks. Much of the nation's groundwater that is contaminated by pesticide residues stems from a serious lack of disposal technology on farms, which typically rely on unlined pits to handle wastes.

A MOBILE SOIL-SAMPLING MACHINE has been developed that can extract in half a minute soil cores of various diameters and depths. Previous samplers took 10 minutes per core. Cores are used for soil chemical analysis, soil mapping, water content determination, root analysis, and other purposes.

A NEW WATER-MANAGEMENT STRATEGY has been developed so brackish water can be used to irrigate certain crops grown in rotation when they are in a tolerant stage. At other times and for sensitive crops in rotation, normal quality water is used. This strategy permits substantial conservation of valuable and limited water resources through re-use of waste water. Cyclic use of brackish water prevents the soil from becoming saline while permitting, over time, substitution of brackish water for better quality water for certain irrigations.

HUMAN NUTRITION RESEARCH

ZINC DEFICIENCY RETARDS BRAIN DEVELOPMENT in offspring of laboratory rats. Research showed that the hippocampus area of the brain of the zinc-deficient offspring was underdeveloped and low in zinc. This area of the brain normally has high concentrations of zinc, a trace mineral essential for the formation of nucleic acids and protein. Research implication: It might be prudent for pregnant women to consume foods rich in zinc, including oysters, the single best source, along with wheat germ, nuts, beef, turkey, and cheese.

FIRST ROOM-SIZE HUMAN METABOLIC CHAMBER has been built in Beltsville to monitor heat produced in the body during normal living. The unit will help explain why some people gain weight on diets that have little or no effect on other people. The chamber, called a calorimeter, also will be used to check the accuracy of existing calorie tables. Many of these tables are based on experiments that were conducted over 90 years ago.

DIET LOWERS CHOLESTEROL IN OLYMPIC ATHLETES when exercise would not hold down blood lipid levels. Research concludes that physically active people, who eat diets high in saturated fats, cannot rely solely on exercise to hold down their cholesterol levels. Switching athletes to a diet with three times more unsaturated than saturated fat lowered their cholesterol levels to normal.

A MORE PRECISE TECHNIQUE FOR MEASURING VITAMIN D and its 11 metabolites in the blood, milk and tissues has been discovered. The new technique replaces bioassay methods which are laborious and imprecise. Imbalances in vitamin D are implicated in rickets and osteomalacia, and other diseases affecting humans.

COMMERCIAL APPLICATION OF RESEARCH

GLASS REINFORCED COTTON CANVAS is being evaluated as a tent fabric with improved strength and flame retardant properties. Samples of the fabric have been sent to industry and commercial organizations in response to requests.

THE U.S. NAVY AND COTTON INDUSTRIES are working with ARS to develop fabric for cotton, flame retardant, easy-care garments for shipboard enlisted personnel. This research meets a need that became apparent when the British Navy encountered new weaponry in the Falkland Islands action.

SARA LEE'S RETAIL FOOD TECHNOLOGY DEPARTMENT expressed interest in an experimental evaluation of computer-formulated corn blends. They believe the program may have application in some of their food products.

NEW CLOTH which absorbs and releases four times more heat than ordinary fabric is of interest to Levi Straus. Another application of this material may be in building insulation and solar heated greenhouses.

A NEW SEWER SYSTEM will be put to practical use in eastern Ohio--the first area in the nation to construct a variable-grade gravity sewer (VGS). The VGS system cuts costs 40 - 50 percent, is virtually maintenance-free, compatible with existing sewer systems, and suitable for new urban developments as well as sparsely populated rural areas.

A NEW TEST to determine the shelf life of ground meats has been developed using commercially available equipment. The procedure, which measures lactic acid content, cuts testing time from 5 or 6 days to 1 hour.

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July 1 to September 30, 1984

INSECT AND WEED CONTROL RESEARCH

TINY SOUTH AMERICAN WASPS ATTACK THE COLORADO POTATO BEETLE, top destroyer of U.S. potato, tomato, and eggplant crops. A 3-year test by USDA researchers cooperating with three states (MD, VA, NJ) showed the pinhead-size wasp controlled 60 to 80 percent of beetles by laying eggs inside these pests' eggs. Chemicals to control these pests cost more than $120 million yearly, and beetles

are developing resistance to them. Uncontrolled, beetles can cause 100 percent losses. Wasps are less expensive and more effective than chemicals and are environmentally safe.
Beltsville Agricultural Research Center, MD

NEW PARASITE MAY HELP CONTROL GYPSY MOTHS. Future gypsy moth outbreaks will be better controlled by an arsenal of biological weapons developed by Agricultural Research Service scientists to make these pests sick, sterile, or sought after by parasites. More than half of all gypsy moths, a serious pest of forest and backyard trees, are killed by a buildup of beneficial foreign parasites. All of the parasites were introduced by ARS researchers.
Newark, DE

A NEW CLASS OF DELAYED-ACTION INSECTICIDES has been found to have potential against fire ants and other insect pests, including cockroaches, houseflies, and mosquito larvae. One toxicant group--sulfonamide analogues--was particularly promising against fire ants.
Gainesville, FL

GRASSHOPPERS' EATING HABITS COULD BACKFIRE ON THEM. Scientists in Montana are screening range plants to find those that grasshoppers least prefer. Their objective: to control these voracious pests by limiting their food supply, at the same time preserving fragile western rangeland.
Bozeman, MT

PLANTING SMALL GRAINS IN SOYBEANS CAN SUPPRESS WEEDS that compete with them. To hold down weed growth while the soybean crop is getting started, USDA scientists planted 48 varieties of winter small grains with soybeans in spring. They want to find out which grains injured the crop least, which most effectively suppressed weeds, and which were most tolerant of herbicides. While small grains hold down weed growth, herbicide treatment may still be necessary.
St. Paul, MN

DIPPING MAY NOT BE NECESSARY TO CONTROL SCABIES. Cattle infected with the parasite may now be injected with low doses of a miticide rather than undergo dipping--a costly, potentially hazardous, and wasteful practice. Researchers found that low doses of avermectin eradicate mites in 7 days and also control intestinal parasites.
Kerrville, TX

BY MARKING SCREWWORM SPERM, SCIENTISTS CAN STUDY the mating habits of sterile and fertile screwworms in the field. A dye, acridine orange, fed to adults or larvae, stains all reproductive tissues without adversely affecting the insect's survival, longevity, or behavior. Marked males that mate with unmarked females transfer sperm that fluoresce under ultraviolet light. Eliminating screwworms would save the U.S. livestock industry over $350 million each year.
Chiapas, Mexico

PLOWING MAY SPREAD RATHER THAN CONTROL WILD MUSTARD, a serious weed pest in spring-seeded small grains in Minnesota and the Dakotas. USDA scientists, investigating the best time and method of eradicating the weeds, say the tiny seeds enter cracks in dry soil and move down below the plow layer (the depth reached by cultivation) or are carried belowground by soil organisms.
St. Paul, MN

IDENTIFICATION OF TWO TICKS MAY LEAD TO BETTER CONTROL OF CATTLE FEVER. Researchers now can readily identify two almost identical tick species that cause the disease. Proper identification will help in developing new biocontrols that rely on sterilizing male ticks through hybrid breeding. Each year, ticks cost the cattle industry over $560 million in losses.
Mission/Kerrville, TX

SEEDS OF WEEDS LIKE VELVETLEAF ARE SPREADING IN THE UNITED STATES because of a toxin they contain that makes them immune to decomposition by soil microorganisms. Once these seeds germinate, however, they are susceptible to microbial attack. ARS scientists are gaining a better understanding of how soil microorganisms can be utilized to keep these weed pests controlled biologically by overcoming early seed immunity.
Columbia, MO

A HAND-HELD SNIFFING "GUN" THAT CHECKS FOR HIDDEN FRUIT in luggage of travelers entering the United States has been developed by federal researchers. The gun could help prevent accidental infestations of pests such as the medfly in California and Florida. In a 2-day test before the opening of the Olympic Games, the device was used to check 90 pieces of luggage at the Los Angeles airport. Illicit agricultural materials were detected in 15 percent of the luggage.
Eastern Research Center, Philadelphia, PA

EMERGENCY FUNDS ARE BEING USED TO CONTROL LYGUS BUGS that damaged more than 50 percent of the Nation's pea and lentil crops last year, causing an unexpected loss of $5 million. ARS recently signed a cooperative agreement with the University of Idaho to furnish emergency funds for research to develop controls for these damaging pests. Pea and lentil exports total about $70 million a year.
Yakima, WA

CROP RESEARCH

A PLANT GENE EXPRESSION CENTER at Albany, CA, will speed genetic engineering of crops to help meet tomorrow's food and fiber needs. It is a cooperative project of ARS, the University of California at Berkeley, and the California State Experiment Station. Annual federal funding of $4 million will be matched by industry and various public institutions. A director and 10 senior scientists will form the core of the center.
Berkeley, CA

TREATING AND PELLETIZING GUAYULE SEEDS increases their germination rate, giving them a better chance of developing into rubber trees. Guayule, a natural source of latex rubber, has trouble germinating when seeds are planted directly in semi-arid fields. Treating seeds with polyethylene glycol, a fungicide, a plant-growth hormone, and other chemicals, and then encasing them in a sand gelatin pellet, increases their chances of surviving from 2 to 50 percent and permits sowing them directly in production fields. Growing guayule in the United States could reduce our trade deficit. Last year over 770,000 tons of natural rubber, worth about $800 million, were imported.
Beltsville Agricultural Research Center, MD

HARVESTING SOYBEANS USING ROTARY DISKS could trim losses of the nation's top export crop by $246 million annually. Rotary disks cut off the stalks and help "airlift" beans that break free so a larger percentage of them land in the harvesting machine instead of on the ground.
Urbana, IL

AGRICULTURAL RESEARCH CAN PAY BIG DIVIDENDS. Every person-year of scientific research to improve cultivars of soft red winter wheat has resulted in increased yields worth $4.5 million. Wheat breeding by Agricultural Research Service-Purdue University teams has returned $2.8 billion in increased yields since 1921. The ARS-Purdue cultivars are sought for their resistance to Hessian fly and other pests and diseases and are used worldwide as parents by other breeders. Now ARS is seeking to learn the chemical basis of resistance to Hessian fly.
West Lafayette, IN

MUCH OF THE NATION'S PLANT RESOURCES--over 600,000 samples--has been computerized to make them accessible to any scientist with a computer and a telephone. The Germplasm Resources Information Network (GRIN), an electronic seed/plant catalogue, is now on line. The product of 7 years of planning, GRIN will serve public and private researchers as well as curators of germplasm (plant gene) collections. GRIN can quickly locate combinations of plant genes needed to develop crops that can better cope with diseases, insects, harsh climates, and poor soil.
Beltsville Agricultural Research Center, MD

THE NATIONAL ARBORETUM'S NATIONAL COUNTRY GARDEN shows novices how to overcome problems with shade, space, and water and soil in growing vegetables and flowers wherever people live and under almost any conditions. The food is grown on vertical walls and in hanging baskets, old tires, even egg cartons. The 3-acre garden project was funded by over 100 gardening organizations and commercial

firms. Food harvested from the garden will be donated to community kitchens.
National Arboretum, Washington, DC

THE TRACE MINERAL NICKEL IS NECESSARY for normal nitrogen metabolism in plants. This is the first new element shown to be essential to plants since chlorine was added to the list in 1954.
Beltsville Agricultural Research Center, MD

A SUPERIOR FORAGE GRASS CALLED "TIFTON 78" has been developed by USDA and University of Georgia researchers. The new variety is a bermudagrass that establishes itself faster than Coastal bermudagrass. It spreads faster, starts earlier in spring, is taller and, like Coastal bermudagrass, is immune to rust.
Tifton, GA

CHRISTMAS TREES CAN BE GROWN IN SEMI-ARID DESERTS using runoff water "harvested" from adjacent land treated to prevent infiltration. Quetta pines and Arizona cypress were tested at Camp Verde, AZ, and methods were found to bring trees to marketable size in 3 to 4 years.
Phoenix, AZ

SCIENTISTS AND COMPUTERS ARE GOING UNDERGROUND to probe the secrets of how roots gather and carry water to aboveground parts of thirsty plants. What they learn in the tangled world of roots will someday help dryland farmers program their microcomputers to make quick management decisions to assure the highest possible yields.
Pendleton, OR

EMBRYO CULTURES ARE BEING USED TO CROSS two members of the cantaloupe family that are resistant to a nematode that severely damages this crop each year. Technology developed from crossing the African horned cucumber and the West India gherkin will be used to transfer this resistance to cantaloupes.
Charleston, SC

ARS SEEKS SCIENTISTS JUST STARTING THEIR CAREERS to staff 26 projects to help broaden support for basic research. Research fellowships totaling $910,000 should encourage scientific talent and help advance scientific techniques, especially in molecular biology and other biotechnologies.
Washington, DC

ANIMAL RESEARCH

NEW LIGHT ON HOW BOVINE VIRAL DIARRHEA, the most prevalent viral disease of cattle, is transmitted from cows to young calves could save ranchers several million dollars annually. BVD, also known as viral one-two, infects at least 80 percent of cattle herds. Experiments confirmed that a persistent infection, hidden in apparently healthy animals, makes them susceptible to a second more serious attack of the same virus that kills by attacking the animal's lymphoid centers. If ranchers can identify persistently infected cows before the second infection, they can slaughter animals before they are reinfected.
National Animal Disease Center, Ames, IA

EWES NEED NOT BE SLAUGHTERED AFTER A SINGLE ABORTION because the cause may not be inherited. Sheep abortions in 16 flocks in five states have been traced for the first time to a microscopic parasite. This parasite carries a disease, called toxoplasmosis, that causes ewes to abort. Once infected, ewes will not abort again even if reinfected. An estimated one-third to one-half of U.S. adult sheep carry the organism that the animal's immune system keeps under control. Reproductive diseases in sheep and goats cost about $50 million in losses annually.
Beltsville Agricultural Research Center, MD

AN EXPERIMENTAL VACCINE MADE UP OF DEAD BOVINE BRUCELLOSIS bacilli has been developed at the National Animal Disease Center. A specific contagious disease of cattle, swine, sheep, and goats, brucellosis outbreaks in unvaccinated dairy herds will cause abortions and reduce milk yields by 20 percent. Several laboratories have developed sophisticated tests that are highly sensitive and can detect bacteria-infected animals better than conventional tests.
National Animal Disease Center, Ames, IA

CROSSBREEDING BENEFITS ARE EXTENDED TO SMALL HERDS. For the first time, small herds can benefit from complex crossbreeding systems previously limited to large herds. USDA geneticists have developed a technique that makes it practical to genetically match production traits in cattle with climate and available locally grown feeds. The new technique should help the 80 percent of U.S. farmers and ranchers with herds of 50 or fewer cows that currently use rotational crossbreeding—a practice that is difficult and inefficient with small herds.
U.S. Meat Animal Research Center, Clay Center, NE

VIROIDS, A NEW CLASS OF DISEASE-CAUSING PARTICLES, could give scientists a clue to causes of many still puzzling diseases. The discovery of these extremely small infectious particles by an ARS scientist has spurred new directions for research into many diseases of animals and plants. Viroids may also open a new path for research into diseases like some human cancers, infectious hepatitis, and multiple sclerosis, whose cause have eluded scientists.
Beltsville Agricultural Research Center, MD

MEMBRANE RESEARCH ATTRACTED OVER 300 OF THE WORLD'S LEADING SCIENTISTS to Beltsville recently to discuss the latest findings. Fluid, film-like membranes, a molecule or two thick, control the essential chemistry and physics of every living cell. Membranes keep all life forms alive and well. Thanks to high-powered instruments and enlightened understanding of the molecules of living things, scientists are now finding that membranes could hold the key to solving many problems in medicine, nutrition, and agriculture.
Beltsville Agricultural Research Center, MD

COMPUTERS CAN HELP DAIRY FARMERS MONITOR THEIR COWS' HEALTH in barn and pasture. Scientists are monitoring milk production and temperature to help spot mastitis infections and to tell them when cows are in estrus. Hopes are that the system can be used to help dairy farmers direct their attention to cows needing special attention before serious problems develop.
Urbana, IL

FEDERAL RESEARCHERS HAVE JOINED FORCES WITH INDUSTRY AND BREEDERS to improve the genetic quality of the nation's beef cattle. Their purpose: to improve the efficiency of beef production. Their efforts have already paid off in the form of a national sire evaluation program for at least 12 breeds of cattle, providing much-needed information to breeders for improving their herds.
U.S. Meat Animal Research Center, Clay Center, NE

THE GREAT PYRENEES MAKE EXCELLENT GUARD DOGS for livestock on rangelands. The U.S. Sheep Experiment Station evaluated three breeds for their ability to protect grazing sheep from predators under both fenced pasture and open range conditions. Eighty percent of the dogs were judged successful.
Dubois, ID

RESOURCES AND ENVIRONMENTAL RESEARCH

EVIDENCE ACCUMULATES ON THE VALUE of leaving residues on fields to slow soil erosion. Even covering 30 percent of the surface of many soils can result in 60 to 70 percent less erosion than on soils with no residue cover. Other recent findings: soils on a 2.5-percent slope eroded 18 times more under plow disk tillage than under no-till. In soybean fields, soil losses on 2 percent slopes that have been fall-plowed or chiseled were three times as great as from no-till.
National Soil Erosion Laboratory, West Lafayette, IN

SEVERE EROSION CAN CUT SOYBEAN YIELDS BY 50 PERCENT. A 2-year study, done with USDA'S Soil Conservation Service, showed that 24 farms in the Southern Piedmont, GA, with normally high-yielding, good loamy soil experienced these heavy yield losses where most of the original top soil was lost.
Watkinsville, GA

A FOG-COLLECTING MACHINE MOUNTED ON A TRUCK is being used to analyze air samples for microscopic particles, like pesticides, wood smoke, dust, and other pollutants. The aim is to find out how pesticides and other organic chemicals cycle in the environment.
Beltsville Agricultural Research Center, MD

SOYBEANS LEAVE SOIL MORE SUSCEPTIBLE TO EROSION than corn, a 7-year ARS study in Iowa shows. Soil losses when corn followed soybeans averaged 4.3 tons per acre from spring plowing to spring plowing. Soil losses when corn followed corn were 3.1 tons per acre; losses when soybeans followed corn were 2.9 tons per acre.
Iowa State Research Center, Beaconsfield

LOW QUALITY WATER SUPPLIES can be used successfully to establish grass after surface mining in the northern Great Plains where natural precipitation is limited.
Mandan, ND

A NEW INSTRUMENT SIMULTANEOUSLY MEASURES WATER CONTENT AND SALINITY. Developed by ARS, it replaces two used in the past for the same purpose, speeds data collection, and reduces costs for land managers and research scientists.
Riverside, CA

HUMAN NUTRITION RESEARCH

INCREASED POTASSIUM INTAKE LOWERS BLOOD PRESSURE in men by increasing the level of sodium excreted. Although potassium and high blood pressure or hypertension have been linked for over two decades, USDA scientists have found an inverse relationship between increased potassium intake and hypertension, a major health problem in the United States.
Human Nutrition Research Center, Beltsville, MD

VANADIUM MAY INFLUENCE CHOLESTEROL LEVELS as well as several biochemical processes involving other trace minerals like copper and iron, amino acids, and a blood protein. USDA scientists at the Human Nutrition Research Center, Fargo, ND, found high blood levels of cholesterol in rats fed diets high in vanadium and low in copper, or low in amounts of both minerals. In studies of the need for and roles of trace minerals in human diets, rats and chicks have proven reliable models.
Grand Forks Human Nutrition Center, ND

MOTHERS OF PREMATURE BABIES PRODUCE MILK THAT IS EASIER TO DIGEST and more suitable for developing the newborn infant's brain and nervous system than milk of mothers who deliver full-term infants. These findings are important in understanding the nutritional requirements of the premature infant and for proper handling of milk in human milk banks.
Beltsville Agricultural Research Center, MD/Eastern Research Center, Philadelphia, PA

AN EXCESS OF VITAMINS AND MINERALS CAN BE AS HARMFUL to human health as too little. Overdoses of many vitamins can force human metabolism to work overtime to rebalance, federal nutritionists find. Megadoses of iron, zinc, copper, and folic acid may cause more problems than they cure. The surest way to a nutritional balance for most adults is to eat balanced diets containing a variety of foods.
Human Nutrition Research Center, Beltsville, MD

TOO LITTLE COPPER AND CHROMIUM are present in the diets of many Americans, researchers find. Dietary copper helps keep serum cholesterol levels in check; chromium helps regulate blood sugar levels in many people. Copper is found in organ meats, not as popular with many Americans as they used to be. Chromium is found in whole wheat and mushrooms, among other foods.
Human Nutrition Research Center, Beltsville, MD

LOWER-SALT RECIPES FOR PROCESSED MEATS AND BAKED GOODS have been developed by ARS scientists. A 2-year study showed that the amount of table salt in hot dogs and corned beef and other processed meats can be reduced by 20 to 25 percent and that in bread- by 50 percent—without sacrificing flavor or texture or reducing their shelf-life.
Eastern Research Center, Philadelphia, PA

GERMINATING SORGHUM SPROUTS AT HOME CAN BE DANGEROUS because of the risk of cyanide poisioning. Less than 4 ounces of sorghum seeds, germinated at the right temperature, can produce enough cyanide to be fatal if eaten in one meal.
Eastern Research Center, Philadelphia, PA

SHELL-LESS TURKEY EGGS MAY UNLOCK THE SECRETS OF EMBRYONIC LIFE in animals and humans. Scientists at Beltsville have developed a new technique that keeps embryos alive outside their shells almost until hatching time. The technique could help expedite research to see how early nutrition relates to human ailments, possibly even to birth defects.
Beltsville Agricultural Research Center, MD

NEW COMPUTER METHOD PROBES WHAT HAPPENS TO HYDROGENATED VEGETABLE OIL during matabolism. The computer measures natural fatty acids, labeled fatty acids, and fatty acids formed during digestion, all in the blood.
Northern Research Center, Peoria, IL

A 12-STORY BUILDING TO HOUSE USDA'S CHILDREN'S NUTRITION RESEARCH CENTER in Houston, TX, will be built with a $49 million supplemental appropriation approved in August. The Center is the only USDA research facility to focus exclusively on the nutrient needs and status of pregnant and lactating women and of infants from conception to adolescence. Established in 1979, the Center will continue to be operated under a cooperative agreement between Baylor College of Medicine and the Agricultural Research Service.
Children's Nutrition Research Center, Houston, TX

COMMERCIAL APPLICATION OF RESEARCH/POSTHARVEST TECHNOLOGY

THE FIRST BACTERIA FOUND TO CONTROL BROWN ROT, the world's most pernicious disease of stone fruits like peaches and apricots, could replace chemicals in controlling the fungus. The first biocontrol developed to check a postharvest disease produces an antibiotic that is safer, more effective, and longer lasting than chemicals. Normally, harvested fruit is sprayed with a fungicide that loses its punch within 2 weeks, allowing the fungus to take over.
Kearneysville, WV/Byron, GA

USDA SCIENTISTS HAVE PRODUCED THE IDEAL COTTON PLANT—one with toxic gossypol in its leaves and stems but none in its seeds. Gossypol protects the plant from insects but also makes seed oil and meal unfit for use as food for humans or as feed for nonruminant animals. The new plants have the toxin in the right places, which saves time and money by eliminating the need to remove it from seed oil and meal after harvest.
Stuttgart, AR

CAMPBELL'S SOUP IS EVALUATING DEFATTED SOY FLOUR produced by USDA scientists at Peoria by extracting oil from soy flakes with supercritical carbon dioxide. The company earlier evaluated laboratory samples of the flour for flavor and physical properties. So far, the flour is not commercially available.
Northern Research Center, Peoria, IL

THE PROTEIN CONTENT OF RICE FLOUR WAS INCREASED from 8 to 25 percent by digesting some of the starch with an enzyme. The creamy white powder dissolves readily in water and can be used for gruels, puddings, and snack foods. A single serving of the flour can meet many of the vitamin and protein needs of 1- to 3-year-old children—an important discovery for less developed countries depending almost entirely on vegetable sources of protein. Food safety tests will be conducted before the product is marketed.
Western Research Center, Berkeley, CA

A NEW OVERSEAS OFFICE TO COORDINATE THE EXCHANGE OF AGRICULTURAL TECHNOLOGIES was established in the Netherlands. The coordinator's mission is to monitor the latest foreign technological developments—especially in biotechnology and genetic engineering—and to assess their impact on American agriculture. The new overseas office fulfills the department's congressional mandate to improve cooperation and communications with Europe's agricultural research community and its foreign cooperators.
Washington, DC

A TASK FORCE OF COTTON INDUSTRY AND USDA RESEARCHERS toured ARS cotton research facilities at Stoneville, MS, and New Orleans to establish closer working relationships among federal, state, and private researchers.
Stoneville, MS/Southern Research Center, New Orleans

INSECT-PRODUCED DUST INCREASES THE POTENTIAL FOR GRAIN DUST EXPLOSIONS by adding to the existing dust load at grain-handling facilities. Lesser grain borers and rice weevils, the main dust producers, are also the most damaging insects of stored grains.
Manhattan, KS

October 1 to December 31, 1984

INSECT AND WEED CONTROL RESEARCH

A FUNGUS THAT DESTROYS GYPSY MOTHS IN JAPAN will be lab- and field-tested by ARS scientists at Ithaca, N.Y. The fungus could serve as another biological weapon against the insect pest's American cousins.
Insect Pathology Research Unit, Ithaca, N.Y.
R. S. Soper, Jr., insect pathologist, (607) 257-2030.

TO HOLD THE LINE ON THE SPREAD OF A PARASITIC MITE of bees that threatens the $180 million U.S. honey bee industry, an ARS entomologist from Laramie, Wyo., has been temporarily assigned to Weslaco, Tex., to cooperate with Mexican and Canadian scientists on controlling the pest.
Fruit Protection and Production Research, Weslaco, Tex.
W. Wilson, entomologist, (512) 986-3159.

AVERMECTIN, A NATURAL PRODUCT derived from soil microorganisms, has proved effective in lab and field studies against the red imported fire ant. It also shows promise in controlling boll weevils, bollworm, and tobacco budworm. The chemical will soon be commercially available.
Insects Affecting Man and Animals Laboratory, Gainesville, Fla.
D. F. Williams, entomologist, (904) 373-6701.

BETTER CONTROL OF LEAFY SPURGE IS NOW POSSIBLE by combining herbicides, plant growth regulators, and new application techniques that increase herbicidal effectiveness. The new system reduces the amount of chemicals needed for control, cuts costs per acre, and lowers environmental risks. Leafy spurge is a noxious, perennial weed that has damaged 3 million acres of U.S. pasture and rangeland, causing annual losses of about $20 million.
North Dakota, Montana, and Wyoming Experiment Stations
W. Shaw, national program leader, weed science, (301) 344-3301.

STINGLESS WASPS FROM EUROPE SAVED FARMERS $29 MILLION throughout the East and Midwest over the past nine years by protecting alfalfa fields from a costly pest called the alfalfa blotch leafminer, also an immigrant from Europe. Since first released, the wasps have overtaken and killed fast-spreading leafminer populations from the Canadian Maritime Provinces to Virginia and west to Michigan. Last year, the buildup of wasps was sufficient to prevent damage estimated at $13 million to alfalfa crops in 10 of the states. Alfalfa is nutritionally the leading feed crop of livestock and is grown on more than 26 million acres nationwide.
Beneficial Insects Research Laboratory, Newark, Del.
R. M. Hendrickson, entomologist, (302) 731-7330.

EVIDENCE THAT DWARF BUNT DISEASE of wheat could not cause an epidemic in Chinese winter wheat is presented in an ARS research report. The evidence should help U.S. wheat growers convince China that it should lift a quarantine on wheat grown in the Pacific Northwest.
Forage Seed and Cereal Research, Corvallis, Oreg.
E. J. Trione, chemist, (503) 754-3451.

MINERAL AND VEGETABLE OILS PLUS SEX PHEROMONES can effectively trap and suffocate grain weevils as well as flour, warehouse, and sawtoothed grain beetles. The new traps will enable food-processing plants and warehouses to quickly monitor the migration and buildup of beetles and to use less pesticide and to help remedy environmental safety problems of bakeries and warehouses in controlling pests.
Bee Management and Entomology Research, Madison, Wis.
W. E. Burkholder, entomologist, (608) 262-1732.

THE EUROPEAN ASPARAGUS WEEVIL can now be curbed with a two-pronged attack. First, the huge stands of wild asparagus the weevils feed on should be

eliminated. Then fall tillage combined with pesticide spraying should kill at least 90 percent of overwintering insects.
Insect Ecology and Behavior Research, Yakima, Wash.
E. Halfhill, entomologist, (509) 575-5974.

LYGUS BUGS THAT COST $54 MILLION A YEAR IN CROP LOSSES and control measures in California alone can now be studied without seasonal interruption. A new mass-rearing procedure and artificial diet allows these pests to be studied year-round without relying on their natural food, fields of green bean pods.
Biological Control of Insects Research, Tucson, Ariz.
H. Graham, entomologist, (602) 629-6220.

TWO TOXINS FROM CROP RESIDUES ARE CUTTING YIELDS OF WHEAT AND BARLEY grown under no-till. Acetic and butyric acids, formed in decaying straw and chaff left from the previous crop, are the culprits. Studies are now underway to see if moving the straw and chaff and seeding crops in one operation would control toxins and at the same time save fuel costs.
Land Management and Water Conservation, Pullman, Wash.
L. Elliott, microbiologist, (509) 335-1551.

AFRICANIZED BEES CONTINUE THEIR NORTHWARD MARCH and are now in Central America. Besides threatening American agriculture by reducing native bee pollination and honey production, the bees would cause a $54 million loss to the beekeeping industry if they spread to Savannah, Ga. as projected. Moreover, recent research indicates the bees can overwinter as far north as New York City, which could double or triple estimated losses. ARS scientists are currently investigating various ways to deal with the problem, like breeding more gentle and productive Africanized bees and learning how to better manage domestic honey bees.
Bee Breeding and Stock Center Laboratory, Baton Rouge, La.
T. Rinderer, geneticist, (504) 766-6064.

A NEW SEX LURE ISOLATED FROM MALE RICE WEEVILS attracts grain weevils. Called an "aggregation pheromone," it lures both sexes of rice, maize, and granary weevils to traps for monitoring and control. Previously, few effective attractants had been found for grain weevils
Bee Management and Entomology Research, Madison, Wis.
W. E. Burkholder, entomologist, (608) 262-3795.

COLOR AERIAL PHOTOGRAPHY IS BEING USED TO DETECT infestations of camphorweed, a troublesome weed increasing its hold on south Texas rangelands. The weed produces a profusion of bright yellow flowers in the fall, when photographs can help researchers pinpoint infested areas, monitor the weed's spread, and delineate areas needing control measures.
Remote Sensing Research, Weslaco, Tex.
J. H. Everitt, range scientist, (512) 968-5533.

GAS CHROMOTOGRAPHY HAS RESOLVED A CONTROVERSY over the number of species of imported fire ants by comparing the venom from both red and black ants. Analysis of alkaloid patterns in ants' venom as well as the fact that the ants can intermate prove there is only one species—a finding that will help facilitate their control.
Insects Affecting Man and Animals Research Laboratory, Gainesville, Fla.
C. Lofgren, entomologist, (904) 737-6701.

PREEMERGENCE SPRAYING IS THE KEY TO HOLDING DOWN JIMSONWEED IN SOYBEANS. A four-year study showed that, when the weed was allowed to grow with soybeans, yields were reduced 23 percent as compared with only a 3 percent decrease when weeds emerged four weeks later than soybeans. Keeping soybeans free of several other weeds will also increase yields.
Soybean Protection Research, Urbana, Ill.
E. Stoller, plant physiologist, (217) 333-1277.

RED FLOUR BEETLES MAY SOON SUCCUMB TO MALATHION, thanks to isolation of the specific gene that provides resistance to this most commonly used insecticide for stored grain. By modifying the specific genes in the insect that resist insecticides, scientists may be able to develop an improved strategy with insecticide control. The red flour beetle's resistance has intensified in the

last 15 years throughout the Midwest and Southeast, especially in Alabama, Florida, and Georgia.
U.S. Grain Marketing Research Laboratory, Manhattan, Kans.
R. Beeman, entomologist, (913) 539-9141.

TEN PERCENT HIGHER RICE YIELDS AND LOWER WEED CONTROL COSTS have boosted net profits of rice growers in the South by $25 million a year. New integrated weed management systems—that include fewer fertilizer and disease control applications and better water management—have increased yields and eliminated the need for two herbicide applications on 500,000 acres of rice.
ARS Research Production and Weed Control Research, Stuttgart, Ark.,
W. Shaw, national program leader, weed science, (301) 344-3301/Roy Smith, agronomist, (501) 673-2661.

NATURAL ALLELOCHEMICALS ARE AN EXCITING NEW WAY TO CONTROL WEEDS. Some weeds manufacture and exude chemicals through their roots and stems that injure other species growing nearby. One such plant, spikerush, exudes several chemicals harmful to aquatic weeds. These allelopathic chemicals have been identified, and progress is being made in synthesizing them. Allelochemistry offers many new approaches to selective weed control.
Western Regional Research Center, Oakland/Davis, Calif.
W. Shaw, national program leader, weed science, (301) 344-3301.

FENOXYCARB APPLIED TO STORED WHEAT successfully controlled the rice weevil, lesser grain borer, confused flour beetle, and Indianmeal moth for two months without lowering the grain's germination. It appears to be an excellent pesticide candidate for protecting stored grain.
U.S. Grain Marketing Research Laboratory, Manhattan, Kans.
R. Beeman, entomologist, (913) 776-2710.

FENITROTHION, AN INSECTICIDE, shows promise for protecting stored peanuts. For years, malathion and synthesized pyrethrins have been the only two insecticides approved for use on stored oilseeds, but insect resistance to malathion and the uncertain supply of pyrethrins has spurred the search for substitutes. Like malathion, fenitrothion degraded after one year yet was more effective than malathion at all standard treatment rates.
Stored-Product Insects Research and Development Laboratory, Savannah, Ga.
L. Redlinger, entomologist, (912) 233-7981.

FOLIC ACID AND RIBOFLAVIN, both B-vitamins, may help protect a virus from breaking down during biological warfare against gypsy moths. Normally, the virus breaks down under the ultraviolet rays of the sun; the B-vitamins act as sunscreens for the virus in the same way that they protect human beings from sunburn.
Gypsy Moth Rearing Research, Otis Air National Guard Base, Mass.
M. Shapiro, entomologist, (617) 563-9303.

HONORS FOR 1984 ARS SCIENTIST OF THE YEAR went to James H. Tumlinson III for heading a team of USDA researchers that identified and synthesized the pheromones of several major insect pests. These chemicals are now being used commercially to lure insects into traps or to confuse them so they fail to mate.
Insect Attractants, Behavior, and Basic Biology Research Laboratory, Gainesville, Fla.
J. H. Tumlinson, chemist, (904) 373-6701.

CROP RESEARCH

SINGLE CELLS FROM POTATO PLANTS that are difficult to cross are being fused to overcome major barriers to breeding better potatoes. The research is aimed at fusing cells from South American species with cultivated U.S. lines to capture genes that transmit such traits as disease resistance into domestic potatoes. New potato plants bred by cell fusion are generally bigger and stronger than either parent and are resistant to potato leaf roll virus, qualities needed by the $1.7 billion U.S. potato industry.
Plant Disease Resistance Research, Madison, Wis.
J. P. Helgeson, plant physiologist, (603) 262-1541.

RESISTANCE TO COLD, DROUGHT, NEMATODES, AND DISEASE is being bred into orange trees using Australian and Chinese relatives of citrus. Also promising is an

Australian citrus relative whose fruit takes only one-third as long to mature as oranges.
U.S. Horticultural Research Laboratory, Orlando, Fla.
H. Barrett, geneticist, (305) 898-6791.

FRUIT TREES CAN BE AUTOMATICALLY PRUNED—a year ahead—by applying a chemical called paclobutrazol to soil at the base of apple and other orchard trees. Branches automatically grow "pruned" the next year, letting in more fruit-producing light and eliminating insect hiding places. The technology could revolutionize how fruit is grown in the future.
Production, Harvesting, and Handling of Tree Fruits Research, Wenatchee, Wash.
M. Williams, plant physiologist, (509) 662-4317.

TO IMPROVE HONEY BEE HEALTH, drones are being bred to do a better job of removing dead and dying bees from the hive, lessening the chance of a disease like chalkbrood spreading through bee colonies. Chalkbrood is a fungus disease that can kill up to 50 percent of bee colonies. Bees annually produce honey and beeswax worth $140 million.
Carl Hayden Bee Research Center, Tucson, Ariz.
M. A. Gilliam, microbiologist, Honey Bee Nutrition Research, (602) 629-6347.

SPEEDY IDENTIFICATION OF THE NEW CANKER DISEASE OF CITRUS was possible because of research already underway at Beltsville on new methods for rapid and accurate disease diagnosis. The sophisticated test identified the disease not only as canker but also as a new strain of the bacterium, information that was so thorough and conclusive that eradication steps were initiated in Florida without delay. The same test also identified a bacterium that caused a new but similar disease found in Mexico. Its quick identification allowed USDA's Animal and Plant Health Inspection Service to make appropriate regulatory decisions to prevent entry into the United States.
Fruit Laboratory, Beltsville, Md.
E. Civerolo, plant pathologist, (301) 344-3569.

NEW PLANTING TECHNIQUE TRIGGERS FAST PEACH GROWTH. Planting young peach trees in killed sod can increase their growth by up to 45 percent in new orchards so that a sizable crop may be harvested in three years. Other kinds of fruit trees may also grow faster planted in killed grass.
Appalachian Fruit Research Station, Kearneysville, W. Va.
W. Welker, soil scientist, (304) 725-3451.

'GUARD,' THE ONLY HARD RED SPRING WHEAT with resistance to Hessian fly, was grown on 20,000 acres in South Dakota in 1984. Next year's planting is expected to reach 250,000 acres. 'Guard,' bred by ARS and South Dakota State University scientists and released in 1983, is also a high producer.
Plant Science and Entomology Research, Manhattan, Kans.
J. Hatchett, entomologist, (915) 532-5861.

TO STEER HONEY BEES AWAY FROM PESTICIDE-TREATED CROPS, scientists are looking at selective breeding among other methods, to develop bees that zero in on targeted pollens. Honey bees will not naturally respond to dietary conditioning, a tactic that works on other insects. Bees move pollen to fertilize crops worth nearly $19 billion annually.
Honey Bee Pesticides/Diseases Research, Laramie, Wyo.
A. Stoner, entomologist, (307) 766-2281.

ARTIFICIAL WINDSTORMS REVEAL PLANT CELLS ARE LOST IN WINDSTORMS. A wind tunnel in Manhattan, Kans., is providing new evidence that cells of young plants—as well as the soil—are literally blown away in windstorms that sweep across Great Plains farmlands. Farming practices that slow wind speed to 15 miles an hour at ground level will protect both soil and such crops as sorghums, soybeans, and wheat.
Wind Erosion Research, Manhattan, Kans.
D. V. Armbrust, soil scientist, (913) 776-2716.

INCREASING THE CALCIUM CONTENT OF PEARS AND APPLES can cure fruit of disorders that occur during growth and storage, like green stain, alfalfa greening, freckle pit, and cork spot. It also increases by 10 percent the calcium available for human nutrition from eating fruit.
Production, Harvesting, and Handling of Tree Fruits Research, Wenatchee, Wash.
J. T. Raese, plant physiologist, (509) 662-4317.

TAN SPOT, A DISEASE THAT CUTS YIELDS OF SUSCEPTIBLE SOYBEAN varieties by as much as 18 percent in about 84 percent of fields in southwestern Iowa, left unscathed such new varieties as 'Amsoy 17,' 'Beeson,' and 'Harcor'—all bred by ARS scientists to resist the disease.
Cereal and Soybean Improvement Research, Ames, Iowa.
J. Dunleavy, plant pathologist, (515) 294-3122.

ZINC DEFICIENCIES CAN STUNT BEAN, POTATO, AND SWEET CORN GROWTH, but the problem can be solved by crop rotation. Beans not fertilized with zinc grew normally when planted after corn but absorbed 12 times as much zinc as when grown after sugarbeets or fallow. Why beans take up more zinc following corn is now under study.
Snake River Conservation Research Center, Kimberly, Idaho.
G. Leggett, soil scientist, (208) 423-5582.

FERTILIZING RANGELANDS with about 200 pounds per acre of ammonium nitrate consistently increased soil water use, tripled or quadrupled grass yields, and boosted protein content of grasses by 9 percent or more in a 9-year study.
Soil and Water Conservation Research, Lincoln, Nebr./Forage, Range, and Shelterbelt Research, Mandan, N. Dak.
J. Power, soil scientist, (402) 472-1484.

ETHREL, A PLANT GROWTH REGULATOR that prevents sugarcane from flowering, passed three years of tests and was recently approved by the U.S. Environmental Protection Agency for large-scale use on sugar plantations. Flowering decreases sugarcane yields by as much as 30 percent. Other benefits observed with ethrel have been extra growth and higher sugar yields.
Sugarcane Production Research, Aiea, Hawaii.
P. H. Moore, plant physiologist, (808) 487-0561.

PYTHIUM ROOT ROT SAPS WHEAT YIELDS in the Pacific Northwest by 15 to 20 percent, but the disease had gone unobserved because it stunts wheat plants uniformly. The identification of 10 species of Pythium is an essential first step toward its eventual control.
Wheat Breeding and Production Laboratory, Pullman, Wash.
J. R. Cook, plant pathologist, (509) 335-3722.

A SINGLE APPLICATION OF PHOSPHORUS in 1967 has maintained wheat yields at higher levels on phosphorus-deficient soils in Montana after 10 crops in 17 years. The single application of 80 pounds per acre, without nitrogen, increased yields each crop year by 15 percent over those on untreated land. Adding nitrogen, just 40 pounds per acre each crop year, increased yields 32 percent. Estimated net return per acre: $19 more than the cost of fertilizing. About 20 million acres in the Northern Great Plains are phosphorus-deficient.
Central Great Plains Research Center, Akron, Colo.
A. Halvorson, soil scientist, (303) 345-2259.

TWO NEW SOYBEAN VARIETIES resistant to soybean cyst nematode have been released for commercial production. Their resistance, combined with early maturity, will extend production 150 miles farther north to cyst-infested fields of the central Midwest. Soybean cyst nematode costs growers about $150 million annually. Another resistant variety, 'Epps,' has been released for the South.
Soybean Breeding and Production Research, Urbana, Ill./ Nematology Research, Jackson, Tenn.
R. L. Bernard, geneticist, (217) 333-6459/L. D. Young, plant pathologist, (901) 424-1643.

MONOCLONAL ANTIBODIES—DIAGNOSTIC TOOLS DEVELOPED IN MEDICAL RESEARCH—are helping scientists identify the best Rhizobium strains to fix nitrogen and spur forage production in poor, acidic soils. Scientists will then try to exploit superior Rhizobium-innoculated crops to increase yields in poor soils.
Appalachian Soil and Water Research, Beckley, W. Va.
S. E. Wright, microbiologist, (304) 252-6426.

SEED OF 'HYCREST,' the first interspecific hybrid of crested wheatgrass, has been released to breeders. Well adapted to intermountain rangelands, 'Hycrest' grows well under semiarid conditions, is an excellent seed producer, and is as well accepted by grazing animals as other crested wheatgrass. It is expected to make a major impact toward revitalizing rangeland in the sagebrush ecosystem.
Forage and Range Research Laboratory, Logan, Utah
K. H. Asay, geneticist, (801) 750-3066.

COMPUTERIZED ESTIMATES OF WHEAT AND CORN YIELDS have become increasingly accurate and valuable in global crop-production forecasts. In recent tests, data from 25 sites spread around the world were punched into computerized models of corn and wheat production. The computer simulations were accurate most of the time and are now being evaluated for use by USDA's Foreign Agricultural Service in parts of Asia and Europe.
Hydrology Laboratory, Beltsville, Md.
J. Ritchie, soil scientist, (301) 344-3490.

THREE ELMS OF DIFFERING SHAPES with resistance to Dutch elm disease are now available to the public from nurseries. 'Dynasty,' a strong, vase-shaped tree, is the first major cultivar of Chinese elm to be introduced into the U.S. 'Homestead' and 'Pioneer' elms, while resistant, lack the American elm's classic vase shape. However, both are highly tolerant of such urban stresses as air pollution.
National Arboretum, Washington, D.C./Nursery Crops Research, Delaware, Ohio.
F. S. Santamour/A. M. Townsend, plant geneticists, (202) 475-4864.

FLUID DRILLING is a new technique for planting seeds by suspending them in a protective gel that carries them into the soil. The method, which also works for very young seedlings, may prove cheaper than using transplants to provide wildlife with food and cover on ranges, forests, and mined lands.
High Plains Grasslands Research Station, Cheyenne, Wyo.
D. T. Booth, range scientist, (307) 778-2220.

SEVERAL VARIETIES OF FOREIGN AND DOMESTIC VEGETABLES have proved promising candidates for cash crops on small U.S. farms. Those that adapt well and enjoy good consumer acceptance include the edible peapod, seedless watermelon, mung bean, and greenhouse cucumber.
U.S. Vegetable Laboratory, Charleston, S.C.
E. V. Wann, plant geneticist, (803) 556-0840.

BEEF PRODUCERS CAN BEAT THE GRASS SHORTAGES that generally come in July and August. By planting seed mixtures that combine warm-season grasses, such as switchgrass and bluestem, with cool-season grasses, farmers can be assured that forage will be available during late summer.
Forage Plant-Soil-Climate Interactions Research, University Park, Pa.,
G. Jung, agronomist, (814) 237-7638.

THE REMOTE SENSING POTENTIAL OF LASER SYSTEMS for detecting crop stress has been demonstrated by ARS scientists. Corn deficient in iron, nitrogen, potassium, and phosphorus and soybeans deficient in boron, phosphorus, sulfur, calcium, magnesium, or potassium can be clearly differentiated from well-fertilized plants. Early stress detection should help improve crop production and commodity forecasting.
Field Crops Laboratory, Beltsville, Md.
J. E. McMurtrey III, agronomist, (301) 344-2646.

ANIMAL RESEARCH

ADDING A SMALL AMOUNT OF YEAST TO CALVES' FEED can help them regain appetites lost to stress from weaning or transportation. Not eating adequately makes calves susceptible to viral and bacterial infections. Just 1 to 2 percent yeast added to calves' poststress diet increased their appetites and ability to convert feed to nutrients. They gained weight more rapidly than calves not fed yeast.
Livestock and Forage Research, El Reno, Okla.
W. A. Phillips, animal nutritionist, (405) 262-5291.

CROSSBRED COWS LIVED 1.4 YEARS LONGER IN THE HERD and were more fertile than purebred cows in studies conducted in the 1960's and 1970's, according to analysis completed in 1984. Angus, Shorthorn, and Hereford cows lived an average of 8.4 years in herd; reciprocal crosses of these breeds averaged 9.7 years and had offspring that were 14 percent heavier than purebred calves.
University of Nebraska, Lincoln, Nebr.
L. Cundiff, geneticist, (402) 762-3241.

FINNRACE, AN IMPORTED BREED OF SHEEP, can greatly increase lamb production over domestic breeds. Ewes with 1/4 to 1/2 Finnrace blood produced 18 and 29 percent more lambs, respectively, than their Rambouillet, Targhee, and Columbia

counterparts when flock-mated to Suffolk rams. The higher production was sustained throughout a typical productive lifetime of 7 years.
U.S. Sheep Experiment Station, Dubois, Idaho.
C. Parker, animal physiologist, (208) 374-5306.

A COMMON WEED IS A PRIME SUSPECT IN CATTLE ABORTIONS occuring during the spring in Louisiana and Texas. Laboratory studies must still confirm the field findings: narrowleaf sumpweed caused abortions in rabbits, and cattle aborted after grazing on land harboring the weed in the two states. The weed, which also grows in Arkansas and Oklahoma, may be most toxic during its early seedling stage when it grows rapidly.
Veterinary Toxicology and Entomology Research, College Station, Tex./Texas A&M University.
L. D. Rowe, veterinary medical officer, (713) 260-9342.

A COMPUTER MODEL OF A DAIRY FORAGE SYSTEM can be used to evaluate new technology and management strategies on farms feeding alfalfa and corn. The model estimates factors such as crop yield, production costs, and net return. It can also assess the impact of new forage conservation methods under a wide range of conditions.
Fruit and Vegetable Harvesting Research, East Lansing, Mich.
C. A. Rotz, agricultural engineer, (517) 353-1758.

GERM-FREE PIGS AND CALVES begin life in a special "delivery room" in Ames, Iowa, to make sure they have a clean bill of health in research seeking to overcome diseases such as dysentery and diarrhea. The first germfree animal was born at Ames in 1973; since then, about 100 pigs and 24 calves a year have been delivered germ-free and the delivery has widened to other animals—from ducks and turkeys to mice, rats, and guinea pigs.
National Animal Disease Center, Ames, Iowa.
P. Matthews/S. Whipp, veterinary medical officers, (515) 239-8200.

A NOTORIOUS WEED, QUACKGRASS, MAY GET A NEW REPUTATION as one of the most nutritious and palatable grasses for livestock. Utilizing its aggressive spreading by breeding it with bluebunch wheatgrass, which is drought resistant, ARS scientists bred a new hybrid that, besides satisfying livestock appetites, is a good candidate for controlling erosion on meadows and pastures in northern states and also seems well adapted to saline sites in states like Montana. It is expected to be available commercially within two years.
Forage and Range Research, Logan, Utah.
K. H. Asay, plant geneticist, (801) 750-3069.

INTRODUCING BENEFICIAL GENES into livestock may someday depend on a scientist's ability to view nuclei in embryos shortly after fertilization. Centrifuging cow and pig embryos at more than 15,000 times gravity caused the sedimentation of dense materials in the ova and allowed for the first time the visualization of cell nuclei. Further, the embryos were undamaged by the treatment, and healthy pigs have been born when centrifuged embryos injected with genes were transferred into surrogate mothers.
Reproduction Laboratory, Beltsville, Md.
R. Wall, animal physiologist, (301) 344-2362.

RESOURCES AND ENVIRONMENTAL RESEARCH

NO-TILL WITH SURFACE RESIDUES MAY BE FEASIBLE ON THE STEEPEST CORN-BELT SOILS. Chisel plowing, paraplowing, and no plowing were tested for the first time on slopes as steep as 18 percent at Coshocton, Ohio. The purpose of the six-year conservation tillage study: to evaluate yields of corn and soybeans as well as fertility; disease; pests; machinery; and losses of water, soil, and chemicals on steep watersheds.
ARS North Appalachian Experimental Watershed, Coshocton/Ohio Agricultural Research and Development Center, Wooster, Ohio.
C. Amerman, hydrologic engineer, (614) 545-6349.

STRIPMINE SPOILS CAN BE RETURNED TO PRODUCTIVE LAND by revegetating them with two forages—thickspike wheatgrass and fourwing saltbush. Both grasses have passed preliminary tests by germinating well in salt solutions similar to those of soil and mining spoil in the Northern Great Plains. Also, fourwing saltbush, a weed which grows on millions of acres from western North and South Dakota and

Kansas to eastern Oregon and Washington, was found to fill a very important void in cattle diets by providing them with more protein, phosphorus, and carotene than most range grasses, especially in winter.
Irrigation, Drainage, and Salinity Research, Mandan, N. Dak./
Agricultural/Surface-Mined Hydrology Research, Fort Collins, Colo.
R. Ries, range scientist, (701) 663-6448.

PLANT DAMAGE FROM DROUGHT IS SHARPLY INCREASED when plants are also exposed to air pollution. A Beltsville team of hydrologists and plant physiologists found that soybean yields were much lower when plants were subjected to a one-two punch of drought plus air pollution than were the combined yield decreases of soybeans exposed to each stress separately.
Plant Stress Laboratory, Beltsville, Md.
E. H. Lee, plant physiologist, (301) 344-3143.

ESTIMATING THE COST OF SOIL EROSION is difficult because all parts of a field do not erode uniformly. Much of the soil from one part of a field is often deposited on another when it rains. Results of a new cooperative agreement between ARS and Purdue University to study field variability should make future estimates of the erosion costs much more accurate.
National Soil Erosion Laboratory, West Lafayette, Ind.
H. Barrows, soil scientist, (317) 494-8685.

WIND EROSION, A SEVERE PROBLEM ON COARSE-TEXTURED SEMIARID SOILS, can be controlled using the right combination of residue management, proper tillage, and wind barriers. Dryland crop yields may be increased by covering the soils with vegetative mulches to increase needed organic matter or by deep tillage every two or three years to increase water infiltration.
Wind Erosion and New Crops Research, Lubbock, Tex.
D. Fryrear, agricultural engineer, (915) 263-0293.

NO-TILL IS A VIABLE ALTERNATIVE TO CONVENTIONAL TILLAGE for swelling heavy clay soils like those of the Blackland Prairie of Texas. A four-year study comparing the effects of tillage on soil properties and on wheat, grain sorghum, and cotton yields showed both systems gave the same yields with no adverse effect on these highly erodible soils.
Soil and Water Resources, Temple, Tex.
J. E. Morrison, agricultural engineer, (817) 774-1201.

LEAVING CROP RESIDUES ON THE SURFACE OF SOILS in the Southern Great Plains and using conservation tillage increased soil water during fallow, which in turn increased yields of subsequent crops. Conserving water from rainfall saves water needed for irrigation, which, along with higher yields, makes an economic crop production system that also saves precious dwindling groundwater supplies in the Ogallala Aquifer.
Conservation and Production Research Laboratory, Bushland, Tex.
P. Unger, soil scientist, (806) 735-6738.

SPACE SHUTTLE RADAR MEASURED MOISTURE BENEATH GROWING CROPS as the U.S. Challenger passed 140 miles above farms near Fresno, Calif. Highly specialized radar measured water in soil down to six inches below the surface. Although it may be a decade before such a system is in widespread use, it should eventually be possible to produce daily soil moisture maps to guide farmer decisions.
Hydrology Laboratory, Beltsville, Md.
T. Engman, hydrologist, (301) 344-3490.

A NEW TREE FOR WINDBREAKS HAS BEEN RELEASED in the Central and Northern Great Plains. Oahe, a hackberry tree with a better rate of survival and growth than common varieties, is suited to well-drained soil in farmstead plantings for controlling soil erosion. It may replace the popular Siberian elm, which is dying from herbicides, disease, and winterkill.
Forage, Range, and Shelterbelt Research, Mandan, N. Dak.
R. Cunningham, plant geneticist, (701) 663-6448.

ARS HAS DEVELOPED A NEW TECHNIQUE for monitoring residues of the pesticide atrazine that can detect parts per trillion. The technique can be applied to a dozen other herbicides and will prove invaluable for tracing pesticides in water, soil, food, and feed.
Central Great Plains Research Station, Akron, Colo.
B. Dunbar, (303) 345-2259.

RUNOFF AND SOIL LOSSES WERE SIGNIFICANTLY LOWERED by winter cover crops and reduced tillage during a six-year study of grain corn and silage corn grown on Missouri claypan soil. Average annual values for crop or management factors derived from soil losses and rainfall data ranged from 11 to 57 percent of currently accepted values.
Watershed Research, Columbia, Mo.
R. Wendt, soil scientist, (314) 875-5331.

COFARM, A COMPUTER MODEL for efficient soil and crop management, can be used by farmers and researchers for organizing and storing data for individual fields, soils, and crops. COFARM can simulate the effects of different management practices and help farmers make decisions on fertilizing, tillage, drainage, residue management, and similar activities.
Soil and Water Management Research, St. Paul, Minn.
M. J. Shaffer, soil scientist, (612) 373-1444.

NO-TILL SOYBEANS GROWN ON CLAY BLACKLAND PRAIRIE SOILS in Mississippi reduced erosion but also reduced yields and net returns. ARS scientists have found a possible link between surface residue and stem canker disease of soybeans. Double-cropped wheat and soybeans, on the other hand, proved an excellent conservation system that is much more profitable than any of the one-crop soybean systems evaluated.
Corn Protection Research Laboratory, Mississippi State, Miss.
J. G. Sanford, agronomist, (601) 325-2350.

AN EXPERIMENTAL NO-TILL DRILL for planting small grains is the first such machine able to place fertilizer—in liquid or solid form and in any combination—either with the seed or "banded" below the seed. Crops planted with the no-till drill in paired rows proved more vigorous than conventionally seeded and fertilized rows planted the same day.
Land Management and Water Conservation Research, Pullman, Wash.
L. Elliott, microbiologist, (509) 335-1551.

SUBSURFACE DRAINAGE SYSTEMS CAN AID SOIL CONSERVATION in low-lying areas of the South with high water tables and high rainfall. High water tables increase runoff, soil erosion, and plant nutrient losses—especially during the rainy months in winter and spring—and inhibit crop production and mobility of farm machinery. Draining some of this groundwater can alleviate the problem.
Soil and Water Management Research, Baton Rouge, La.
C. Carter, agricultural engineer, (606) 258-2683.

SOIL EROSION WAS REDUCED 70 PERCENT UNDER CONSERVATION TILLAGE as compared with conventional tillage during 11 years of testing in Mississippi. Tests also showed that conservation tillage increased cotton seed yield and decreased runoff.
USDA Sedimentation Laboratory, Oxford, Miss.
C. Mutchler, hydrologic engineer, (601) 234-4121.

WIND-GENERATED ELECTRICITY FOR PUMPING irrigation water in the Great Plains can reduce the amount of electricity purchased while maintaining the farmer's ability to provide crops with water at critical growth stages. In trials, two wind turbines provided 77 percent of the energy consumed by a center pivot and irrigation pump and also provided some excess power each month.
Wind Powered Irrigation Research, Bushland, Tex.
R. N. Clark, agricultural engineer, (806) 378-5734.

HUMAN NUTRITION RESEARCH

TOO MUCH SALT AND NOT ENOUGH POTASSIUM IN U.S. DIETS may be increasing the chances of Americans getting high blood pressure. Results of a year-long study of 28 men and women show they are eating nearly double the amount of sodium in relation to potassium when a safe and adequate intake should be reversed—0.6 sodium to 1.0 potassium.
Vitamin and Mineral Nutrition Laboratory, Human Nutrition Research Center, Beltsville, Md.
Jim Smith, chemist, (301) 344-2417.

VITAMIN B_6 RELIEVES THE SYMPTOMS OF SICKLE CELL ANEMIA, an inherited blood disease affecting about 50,000 black Americans. Working with a physician at Columbia University, New York, ARS scientists found that patients given two 50-

mg doses of the vitamin daily had less frequent and severe attacks of the disease.
Vitamin and Mineral Nutrition Laboratory, Human Nutrition Research Center, Beltsville, Md.
R. Reynolds, chemist, (301) 344-2459.

A HIGHER RATIO OF POLYUNSATURATED FATS IN DIETS can help lower blood pressure. Hypertension—chronic high blood pressure—increases the risk of heart attack and stroke and affects one out of every five Americans over the age of 25. By increasing their intake of polyunsaturated fats by 6 to 7 percent, 40-to 60-year-old men and women with normal or slightly high blood pressure lowered their blood pressure, regardless of their saturated fat intake.
Western Regional Research Center, Berkeley, Calif.
J. Iocono, director, (415) 556-9699.

CHOLESTEROL INHIBITORS HAVE BEEN ISOLATED AND IDENTIFIED in barley and oats. When these fractions were fed to chickens at concentrations of 25 parts per million, levels of cholesterol-bearing, low-density lipoproteins in chickens' blood plasma decreased by 40 percent, as compared with those of chickens fed a control diet of mainly corn. The inhibitors may someday be added to human foods to decrease the risk of heart disease.
Cereal Crops Research Unit, Madison, Wis.
D. Peterson, horticulturalist, (608) 262-3355.

SYNTHETIC SUGAR USED TO TREAT LIVER DISEASE can be made at less expense from whey, a cheesemaking byproduct. The new process could lower the cost of making lactulose and make it available for a wide range of food and drug uses and as a noncaloric sweetener. Lactulose is used to treat adverse brain effects from advanced liver disease, known as portal systemic encephalopathy or hepatic coma, which, if left unchecked, can lead to coma and death.
Food Chemistry Research, Eastern Regional Research Center, Phildelphia, Pa.
K. Hicks, chemist, (215) 233-6458.

BRAN ABSORBS MINERALS as it passes through the human digestive tract. Excessive amounts of wheat bran can remove enough calcium from the GI tract to cause a negative calcium balance. Dry-milled corn bran has been shown to bind more calcium, copper, iron, and zinc than it contained before it was ingested.
Cereal and Food Biochemical Research, Northern Regional Research Center, Peoria, Ill.
F. A. Dintzis, chemist, (360) 671-4011.

BITTERNESS IN CITRUS JUICES CAN BE REMOVED by passing them through a column packed with immobolized bacterial cells. A key step was isolating the bacteria able to metabolize limonoids which cause the bitterness. Commercial development of this simple debittering process could save the California citrus industry alone about $8 million. It should be available commercially in three to five years.
Fruit and Vegetable Research, Pasadena, Calif.
S. Hasegawa, chemist, (213) 681-7294.

COMMERCIALIZATION OF A NEW PROCESS to produce partially defatted almonds may open new markets for the U.S. crop. In the process, almonds are pressed to remove 55 percent of the oil, expanded in hot water containing dextrose, and then salted and roasted in hot oil. After roasting, the nuts still contain 45 percent less oil than the unprocessed almonds.
Food Products Research, Southern Regional Research Center, New Orleans, La.
J. Pominski, chemical engineer, (504) 589-7012.

STRAWBERRIES PRODUCE A COMPOUND that can be formulated into a fumigant against aphids on lettuce and thrips on strawberries. The compound—ethyl formate—can be used as a fumigant on packaged lettuce and strawberries in a partial vacuum. It leaves no residue and also destroys insect pests on dried fruits. If approved as a fumigant, ethyl formate could aid the U.S. export of lettuce and strawberries to countries with restrictions on residue levels of fumigants.
Horticultural Crops Research, Fresno, Calif.
J. M. Harvey, plant pathologist, (209) 487-5334.

BRAN SPAGHETTI SCORES HIGHER IN PROTEIN AND MINERALS. Dietary fiber in spaghetti is increased threefold if 10 percent bran is added in making pasta. Bran also increases by about 40 percent protein, iron, calcium, manganese,

phosphorus, and zinc in the spaghetti, which is inherently low in sodium, fats, and simple carbohydrates and contains a high level of complex carbohydrates.
Hard Red Spring and Durum Wheat Quality Laboratory, Fargo, N.D.
V. L. Youngs, food technologist, (701) 237-7728.

COMMERCIAL APPLICATION OF RESEARCH/POSTHARVEST TECHNOLOGY

APPLE PROCESSORS AND EXPORTERS NO LONGER NEED TO DIP FRUIT IN CHEMICALS to control storage scald, an unsightly brown surface skin condition. Virtually scald-free fruit can be had by just storing it in a controlled environment of 1 percent oxygen and 1 percent carbon dioxide.
Production, Harvesting, and Handling of Tree Fruits Research, Wenatchee, Wash.
K. Olsen, plant physiologist, (509) 662-4317.

IRRADIATING APPLES TO CONTROL CODLING MOTHS is being tested as an alternative to fumigation. Apples are being irradiated at low levels for different time periods and at varying doses when insects are in the young, middle-aged, and mature larval stages.
Crops Protection Research, Yakima, Wash.
A. Burditt, entomologist, (509) 575-5956.

AN ELECTRONIC EGG MAY HELP LOWER BREAKAGE losses by detecting the forces being exerted against the shells of real eggs during mechanized grading and packing. About seven percent of U.S. eggs crack during the largely automated journey from hen to market. If egg breakage could be reduced by just one percent, about $20 million yearly could be saved, provided half of these could be salvaged and used for other purposes.
Food Protection and Processing Research, Richard B. Russell Agricultural Research Center, Athens, Ga.
J. A. Dickens, engineer, (404) 546-3132.

A NEW HYBRID DIESEL FUEL, made from crude vegetable oil, will be engine-tested as an alternative fuel for farm tractors. Developed by a new process that converts the vegetable oil to diesel fuel without altering its chemical structure, the new fuel remains clear, stable, and usable at low temperatures, is free of corrosive emulsifiers, and can be blended with other fuels on farms.
Exploratory Organic Reactions Research, Northern Regional Research Center, Peoria, Ill.
A. Schwab, chemist, (309) 685-4011.

FABRIC FINISHES LIKE DURABLE PRESS can now by improved because of a more direct method of analyzing tiny, individual particles on cotton fibers. The new method uses advanced technology (scanning electron microscopy and energy dispersive x-ray analysis) instead of the customary mechanical means or solvents to remove particles for further study.
Fiber and Yarn Technology Research, Southern Regional Research Center, New Orleans, La.
G. Louis, textile engineer, (504) 589-7586.

X-RAY ANALYSIS OF GRAIN KERNELS CAN DETECT HIDDEN INSECTS and tell whether larvae are dead or alive. Video film enlargement of x-ray scans reveals insect eggs and pupae that are too small for currently available detectors. Such image analysis may someday be computerized to automatically count the number of insects in a sample, a technique that will help to improve inspection standards and procedures.
Engineering Research, Western Regional Research Center, Albany, Calif.
T. Schatzki, chemist, (415) 486-3701.

UNPALATABLE FLAVORS IN GRAINS CAN BE REMOVED with a treatment that inactivates two enzymes responsible for the off-flavor. Treated common cereal grains retain their germ, remain rich in protein, vitamins, and minerals, and can be milled into shelf-stable, high-fat flour, whose texture and properties equal those of fresh or degerminated flours.
Field Crops Postharvest Research, Northern Regional Research Center, Peoria, Ill.
G. Bookwalter, food technologist, (309) 685-4011.

A MILD COTTON-CURING PROCESS THAT ADDS DURABLE PRESS QUALITIES to fabrics without using formaldehyde or its derivatives has attracted the interest of several major companies. The process has become attractive because of

anticipated tightening of regulations by the U.S. Environmental Protection Agency that could eliminate certain formaldehyde uses because of potential cancer concerns.
Polymer Products Research, Southern Regional Research Center, New Orleans, La.
C. Welch, chemist, (504) 589-7062.

A FAST, NONDESTRUCTIVE METHOD for measuring the concentration of individual simple sugars—like glucose, fructose, and sucrose—in aqueous solutions has been developed using optical radiation in the near infrared region. The method has potential value as a quality-control procedure in food processing.
Quality Evaluation Research, Richard B. Russell Agricultural Research Center, Athens, Ga.
F. Meredith, chemist, (404) 546-3156.

COTTON BATTING TREATED WITH BORIC ACID was better protected against smoldering in ARS tests than the foam presently used by furniture manufacturers. Peak surface temperatures also were lower for batting than for foam.
Special Products Research, Southern Regional Research Center, New Orleans, La.
D. J. Donaldson, chemist, (504) 589-7561.

NEWLY DISCOVERED GENES OPEN WAY TO LONGER SHELF LIFE for soybean oil products. Breeding the new genes into soybean varieties would help curb off-flavors and objectionable odors caused by the breakdown of unsaturated fatty acids. Soybean oil is used in margarines, salad dressings, and cooking oil.
Plant Science Research, West Lafayette, Ind.
J. R. Wilcox, geneticist, (317) 494-4772.

January 1 to March 31, 1985

CONSERVATION AND NATURAL RESOURCES RESEARCH

GROUND WATER POLLUTION caused by applying dissolved chemicals at the surface can occur much more quickly than previously suspected. New research indicates that water moves down through wet soils twice as fast as predicted by theoretical models. In drier soils, the rate is 4-5 times faster than previously thought. Some chemicals, however, may break down on the way.
U.S. Water Conservation Lab., Phoenix, AZ
Herman Bouwer, (602) 261-4356

COLD SOILS CAN REDUCE the amounts of zinc and other trace minerals that people get in their diets. New studies show plant roots do not penetrate deeply enough into chilled soils to absorb sufficient minerals. One solution to the problem could be boosting the zinc and phosphorus content of fertilizers for spring and fall applications, perhaps with special fertilizer formulas tailored to climatic conditions in each ecological zone.
U.S. Plant, Soil, and Nutrition Lab., Ithaca, NY
David Grunes, (607) 256-3003

A ONE-TIME APPLICATION of a soluble chemical can affect ground water for several years. When potassium bromide, a tracer, was applied at a rate often used for nitrogen fertilizer on two 3-acre-pasture watersheds, ground water samples from springs supplied by the watersheds showed peak bromide concentrations 21 to 24 months after application. After 45 months, there still was no meaningful decrease.
North Appalachian Exp. Watershed Res. Lab., Coshocton, OH
Lloyd B. Owens, (614) 545-6349

SOIL EROSION REDUCES FERTILITY, even in the deep loess soils of the Palouse in the Pacific Northwest. An ARS soil scientist finds that, about 15 inches deep, the soils become calcareous. As soil washes away, reduced levels of organic matter cause nitrogen to drop, and phosphorus levels 6-12 inches deep are half again lower than in the top 6 inches of soil. Eroded soils also store less moisture.
Soil Mgt. and Water Quality Research Lab., Kimberly, ID
Truman W. Massee, (208) 423-5582

SORDAN, A FORAGE HYBRID OF SORGHUM AND SUDANGRASS, may have the ability to reclaim unproductive, salt-bound soils. An ARS scientist has discovered that

the roots of Sordan give off more than twice as much carbon dioxide as most other plants. In moist soils, the high CO_2 levels lower the pH enough to dissolve the lime in the soil. The dissolved lime, in turn, replaces unwanted sodium attached to the clay, and the sodium can then be leached out by irrigation. Expensive applications of gypsum would be unnecessary. Testing the theory, a rancher planted Sordan on a totally unproductive salt-bound field and subsequently harvested 20 tons of forage per acre. Tests continue of this promising hybrid.
Snake River Conservation Research Center, Kimberly, ID

IN AN EFFORT TO LOCATE specific sugarbeet genes, ARS scientists have discovered that establishing gene locations on chromosomes can be done much more quickly, efficiently, and precisely by using trisomic plants—those having a specific extra chromosome. They have now developed all nine possible trisomic types of sugarbeets and described them, paving the way for precise genetic engineering.
Crops Res. Lab., Fort Collins, CO
Richard J. Hecker, (303) 482-7717

A ONE-MINUTE TEST for rubber, resin, and moisture content of guayule, a shrub native to the southwestern United States, has been developed to replace the current slow, tedious process. Guayule is being studied as a potential source of domestic rubber. The new analysis method uses near-infrared reflectance spectroscopy with computer assistance.
Northern Regional Research Center, Peoria, IL
G. E. Hamerstrand, (309) 685-4011, Ext. 536

WHILE LITTLE BLUESTEM IS COMMON on tallgrass prairies, it is less palatable to cattle than other dominant tallgrasses. ARS scientists in Oklahoma have found that prescribed burning fails to stimulate the growth of little bluestem as it does such preferred grasses as big bluestem and indiangrass. This means that fire can be used to produce a more favorable composition of grass species on prairie grazing lands.
Range and Pasture Research Unit, Woodward, OK
Phillip L. Sims, (405) 256-7449

THE "GREENHOUSE EFFECT" of carbon dioxide may not be all bad. A number of scientists have predicted that rising levels of CO_2 in the atmosphere will eventually raise global temperatures enough to melt polar ice caps, cause sea levels to rise, and ultimately flood coastal cities. But not all scientists agree. An ARS physicist points out that actual temperature increases to date in the extreme northern latitudes are substantially below the projections of pessimistic climate modelers. He also observes that predicted higher CO_2 levels, while having no detrimental effect on people or animals, would significantly improve plant productivity by increasing photosynthetic activity, as laboratory tests have shown.
Soil, Plant and Atmosphere Systems Lab., Phoenix, AZ
Sherwood Idso, (602) 261-4356

A NEW BREEDING TECHNIQUE that makes use of early flowering lettuce plants can cut in half the time needed to develop disease-resistant varieties. Early flowering plants are commercially useless, since they skip the vegetative stage, but an ARS scientist has found that he can use the early flowering genes to carry more desirable genes. He was able, for example, to insert genes for mosaic resistance into a non-resistant lettuce variety in 375 days, compared to 750 days using normal lettuce. He believes the technique can be applied to other plants with early flowering varieties, including peas, soybeans, beans, spring wheat, rice, and sugarbeets.
U.S. Agricultural Research Sta., Salinas, CA
E. J. Ryder, (408) 443-2253

WEEDS THAT SURVIVE herbicide spraying can be mopped up with a new tractor attachment called a rotary herbicide wiper. A spinning disk wipes (instead of sprays) a herbicide directly onto weeds growing beneath the crops. The method avoids herbicide drift and increases operator safety.
Appalachian Fruit Research Station, Kearneysville, WV
William Welker, Jr., (304) 725-3451

THE MYSTERY OF STUNTED SEEDLINGS and uneven stands in tree nurseries has been solved by ARS scientists in Oregon, who have shown that inoculation with certain fungi enhances growth of at least 4 species of conifers--Western red cedar, incense cedar, coast redwood, and giant sequoia. Conifer seedlings were treated with 3 species of vesicular-arbuscular mycorrhizal (VAM) fungi, which had inadvertently been killed during routine soil fumigation in the greenhouse. Treatment not only increased biomass, but it also enhanced seedling uniformity and size in all 4 species. Fumigants are now recommended that will leave unharmed the VAM fungi occurring naturally in the soil.
Horticultural Crops Research Unit, Corvallis, OR
Robert G. Linderman, (503) 757-4544

MOLECULAR BIOCHEMICAL TECHNIQUES have determined that chloroplast DNA in soybeans is inherited only from the female parent. Chloroplast DNA is the site that contains the information for photosynthesis. This research has academic significance in understanding the evolutionary history of the cultivated soybean and practical application in breeding programs where it is necessary to transfer desirable traits from wild species.
Cereal & Soybean Improvement Res., Ames, Iowa 50011
Reid Palmer, (515) 294-7378

THE TARNISHED PLANT BUG, until recently considered but a minor pest of cotton in the Mid-South, is now known to cause considerable damage during the bug's peak months of May and June. In tests in 1981-83, ARS researchers applied aldicarb, a systemic insecticide, to cotton at planting. As a result, they realized yield increases of as much as 20 percent. In 1984, several foliar insecticides applied weekly in June successfully controlled plant bug populations, while uncontrolled populations reduced yields as much as 40 percent and delayed harvest 2 weeks. Environmental hazards were kept to a minimum during applications. Meanwhile, researchers have found a mite that is a parasite and predator of the plant bug.
Southern Field Crop Insect Mgt. Lab., Stoneville, MS
E. G. King, (601) 686-2231

GETTING THE BEST RESULTS from pesticides sprayed on plants depends on keeping the droplets on the leaves. An ARS researcher uses high-speed motion pictures to show that large portions of droplets sprayed on some plants rebound as many as six times after impact. He is currently testing droplet velocity, droplet size, electrostatic charge, and surfactants, as a first step in improving pesticide applications.
Agricultural Eng. Res. Lab., Wooster, OH
Donald L. Reichard, (216) 264-1021

BEAN RUST, A MAJOR FUNGUS DISEASE of snap and dry beans, was controlled biologically in tests under field conditions. Frequent application of *Bacillus subtilis*, a bacterium culture previously used to control bean rust under greenhouse conditions, may provide an environmentally desirable alternative to costly fungicides. Future research will seek to identify and purify the *B. subtilis* inhibitor and possibly modify its chemical structure to improve its stability in the environment.
Plant Pathology Lab., Beltsville, MD
C. Jacyn Baker, (301) 344-3486

AN INSECTICIDE developed from an extract of the tropical neem tree controls leafminer flies, a major insect pest of flower and vegetable crops. Produced by a commercial firm, the insecticide is the first pest control product to result from extensive ARS research demonstrating that neem tree compounds can be developed to control dozens of agricultural pests. The insecticide awaits EPA registration.
Biologically Active Natural Products Lab., Beltsville, MD
Martin Jacobson, (301) 344-2025

IN A NEW AUTOMATED PLANT CULTURE SYSTEM, plants develop twice as fast as with a manual system. Within the system, a microcomputer controls medium input and extraction in a sterile environment. Cultures were found to survive for

record-breaking intervals without detriment using the automated system. The new system has promise for commercial application.
Fruit and Vegetable Chemistry Lab., Pasadena, CA 91106
Brent Tisserat, (818) 796-0239

TRICKLE IRRIGATION IS MUCH MORE EFFICIENT on cotton than is furrow irrigation when the objective is maximum lint yields and when water supplies are limited, according to the latest experiments with the traveling trickle irrigation system. The laser-directed machine also has helped demonstrate that low-cost saline water can be used to irrigate some crops because the water applied does not touch the plants.
Water Management Res. Lab., Fresno, CA
Claude Phene, (209) 291-3611

'MARSHALL', A HARD RED SPRING WHEAT variety released in 1982 by ARS and the Minnesota Agricultural Experiment Station, has taken over 57 percent of that State's hard red spring wheat acreage. 'Era,' the former leader, dropped from 64 percent of the acreage in 1979 to 16 percent in 1984. Both varieties are semi-dwarf types. 'Marshall' has more protein than 'Era,' matures 2 days earlier, and stands up well against the elements.
Plant Science Res. Lab., St. Paul, MN
Robert H. Busch, (612) 373-1370

MEDFLY THREAT TO U.S. ORCHARDS MAY BE LESSENED when a way is found to synthesize a natural plant chemical. Scientists are about a year away from reproducing an ingredient in the oil of angelica plants, a powerful attractant to Mediterranean fruit flies. The lure lasted four times longer in field tests than the attractant currently used in traps to detect new invasions of the dangerous pest.
Biological Active Natural Products Lab., Beltsville, MD
Martin Jacobson, (301) 344-2025

USDA-DEVELOPED PECAN CULTIVARS TOOK TOP HONORS recently at an international large pecan show. Released several years ago, 'Wichita,' 'Sioux,' 'Choctaw,' and 'Cheyenne' are growing yearly in popularity. 'Wichita' is the most widely propagated cultivar here and abroad. 'Cheyenne' is most recommended for planting throughout the United States because of its good shelling qualities. Each year's pecan crop is worth about $162 million, the third largest nut crop.
Pecan Genetics and Improvement Research, Brownwood, TX
Richard Hunter, (915) 646-0593

STIMULATING APPLE TREE GROWTH INCREASES BRANCHING. Spraying 8-year-old trees with AVG (aminoethoxyvinlyglycine) right after harvest increased threefold the number of branches. This growth helps to build more quickly a fruit tree's framework. AVG has no apparent adverse side effects but is still in the experimental stage.
Tree Fruit Research, Wenatchee, WA
Eric A. Curry, (509) 662-4317

APPLYING PLANT GROWTH REGULATORS to soil beneath fruit trees could reduce excessive vegetation and improve fruit quality. Commercial application of this technique to several fruits, including apples, pears, sweet cherries, peaches, nectarines, and plums, should hasten fruit production and make it more consistent. Soil-applied growth regulators penetrate trees better and improve insect and disease control, require fewer applications, and reduce labor costs from hand pruning.
Tree Fruit Research, Wenatchee, WA
Max W. Williams, (509) 662-4317

A NEWLY DISCOVERED MOVABLE ELEMENT IN SOYBEAN GENES may speed up genetic engineering of crop plants. Scientists have found that molecules called Tgml in soybean genes resemble those of "jumping" genes found earlier in corn and snapdragons. This similarity suggests that this and other movable elements may be appropriate for transferring genetic traits, like disease resistance and high nutritional value, to plants that cannot be bred by traditional means.
Plant Molecular Genetics Lab., Beltsville, MD
Lila Vodkin, (301) 344-3308

FUTURE "SOIL WARS" WILL ENLIST THE HELP OF BENEFICIAL ORGANISMS to battle soilborne fungi and bacteria that each year cause over $4 billion in U.S crop losses from disease. Over the past 3 years, research has accelerated in finding ways to pack fungus-fighting organisms in gel pellets or powders for farmers to spray onto their fields or drop into seed furrows. Several U.S patents are pending or have been granted with industries' cooperation. Agency scientists predict that the first commercial "battlefield" will be against highly-destructive seedling diseases of horticultural crops.
Soilborne Diseases Lab., Beltsville, MD
George Papavizas, (301) 344-3682

THE FIRST PLANT WITH NATURAL RESISTANCE TO SEVERAL VIRUSES has been found by agency scientists searching for plants immune to only one virus. If they can find a way to transfer this virus-resistance to cultivated species of potatoes and tomatoes, commercial producers of these crops could save more than $200 per acre a year. Growing hybrids with built-in resistance to potato leafroll, tomato yellow top, and beet curly top would be more effective and less expensive and would not harm the environment.
Vegetable Crops Production, Prosser, WA
Peter E. Thomas, (509) 786-3454

FUNGUS IS IMPLICATED FOR FIRST TIME IN WHEAT AND BARLEY disease in the Pacific Northwest. Discovery of Rhizoctonia bare patch in no-till and reduced tillage fields—the first reported case of this fungus-caused disease in the United States--is important because of the increasing trend toward conservation tillage.
Wheat Breeding and Production, Pullman, WA
David Weller, (509) 335-6210

POTATO GROWERS CAN SAVE $60 per acre in fertilizer cost by better balancing irrigation water and nitrogen applied to optimize potato yields on sandy soils. Several years of research in Washington showed that farmers have been applying too much water, and thereby moving fertilizer out of the reach of plants--so they had to apply more fertilizer than was actually needed by the potatoes.
Soil and Water Management, Prosser, WA
David A. Lauer, (509) 786-3454

SHADE AND FLOWERING TREES WITH TOUGHER WOOD can be bred now that scientists have found ways to select, within 1 year, young trees that resist decay caused by injury. Research confirms that trees inherit the ability to manufacture chemicals that "box in" wounded wood, thus preventing further decay. Decay seldom kills trees, but decayed trees occasionally fall on people and cause much property damage each year.
U.S. National Arboretum, Washington, DC
Frank Santamour, (202) 475-4850

THOUSANDS OF CEREAL GRAINS BEING GROWN in field nurseries will undergo a battery of tests aimed at cataloging their characteristics for inclusion in the National Small Grain Collection. For positive identification and botanic classification, such qualities as early maturity, short stalk, and high yielding are being determined as well as resistance to diseases, insects, and drought, extreme temperatures, and end-product use (like milling, baking, malting, and cooking). All these findings will significantly enhance the collection's value to plant breeders and other researchers worldwide who depend on the collection for seed and germplasm to develop new and better varieties of grains.
Germplasm Resources Lab., Beltsville, MD
Leland W. Briggle, (301) 344-3713

ANIMAL PRODUCTION AND PROTECTION RESEARCH

FEED COST FOR FINISHING BEEF CATTLE CAN BE REDUCED by 25 cents per pound if the animals have grazed wheat forage before the finishing period. Tests showed that cattle grazing wheat forage, a feed source high in nonprotein nitrogen, gained more weight faster than they did on other feeds during the

early part of the 200-day fattening period before they were slaughtered.
Livestock and Forage Res. Lab., El Reno, OK
William Phillips, (405) 262-5291

TESTS WERE "ENCOURAGING" of a genetically-engineered antigen that could become a key to developing a vaccine against coccidiosis, an intestinal disease of poultry that costs the industry $300 million a year. ARS researchers worked with Genex Corp. to develop the antigen, which conferred the first protection ever obtained against any species of coccidia by any method other than inducing actual infection. Work with Genex will continue to turn the antigen into a vaccine.
Animal Parasitology Institute, Beltsville, MD
Harry Danforth, (301) 344-2427

USING A SIMPLE NEW PROGRAM, a small, inexpensive computer can regulate the environment of a poultry house, maintaining temperature and humidity within a narrow range. Until now, a skilled operator was required to make adjustments to control the environment in broiler houses, especially during periods of changing weather.
Poultry Mechanization Res. Lab., Miss. State, MS
Floyd N. Reece, (601) 323-1964

CALF DEATHS, which cost U.S. beef producers more than $300 million annually, could be cut in half through improved management, according to ARS animal researchers. Records show that nearly 70 percent of calf losses occur at calving or during the first 72 hours after birth, with the major causes of death delayed or difficult births. This not only reduces the calf crop but also reduces the pregnancy rate the following year. One week after birth, the leading cause of calf death was disease, including pneumonia and scours.
Fort Keogh Livestock and Range Res. Sta., Miles City, MT
Robert A. Bellows, (406) 282-4970

PLASTIC BEEHIVE COVERS costing about $5 each helped honeybee colonies survive Wisconsin winters on 20% less honey than colonies consumed in uncovered hives. The ARS-designed covers, which should last from 5-10 years, are made from translucent white plastic.
Bee Mgt. and Entomology Res. Lab., Madison, WI
Eric H. Erickson, Jr., (608) 262-1732

NOT DIET ALONE, but an interaction between genetic makeup and diet, has been found to affect the cardiovascular system of pigs—eventually. A diet loaded with fat and cholesterol had no deleterious effects on either genetically fat or genetically lean pigs that were slaughtered at 6 months. After 16 months, however, lean pigs had more aorta surface with fat accumulations than did genetically obese pigs. Besides having implications on how diet and genetic makeup interact to increase pork production, the study may have implications for humans, since pigs are being used more and more as models in an attempt to resolve dietary and cardiovascular problems in man.
U.S. Meat Animal Research Center, Clay Center, NE
Wilson Pond, (402) 762-3241

TWO PRESSURIZED SPRAYS available commercially proved effective in protecting people from a tiny tick, Ixodes dammini, that transmits Lyme disease. First diagnosed 10 years ago in Old Lyme, Conn., the disease leaves many human victims with sore, swollen joints and, in some cases, heart disorders. In ARS tests in a tick-infested area in Massachusetts, a 0.5% permethrin spray applied to the exterior surface of military pants and jacket provided complete protection against attack by all life stages of the tick. Applications of 20% and 30% deet, a common insect repellent, provided 86% and 92% protection, respectively. Lyme disease is now the most common tick-borne disease in the United States.
Insects Affecting Man and Animals Res. Lab., Gainesville, FL
Carl E. Schreck, (904) 374-5968

MODIFYING ANIMAL DIETS by adding high levels of high-fiber foodstuffs in order to reduce costs was found to have some adverse effects upon sows during gestation. Reproductive performance was not affected by the addition of up to 95 percent alfalfa meal, except that the weaning weights in pigs was

reduced. There was a significant reduction, however, in the sow's ability to digest fiber components at 100 days of gestation. That would suggest problems with under-nutrition, particularly with respect to energy, could occur during late gestation in sows fed high levels of high-fiber diets.
Nonruminant Animal Nutrition Lab., Beltsville, MD
Corlette Calvert, (301) 344-2222

A ROUGHENED PLASTIC LOOP helps cows fight off mastitis, the most serious disease of dairy cows, causing estimated losses of over $1 billion yearly. Cows with the new loop, inserted harmlessly into udders, experienced a 75% reduction in severe mastitis. The roughened surfaces of the loops attract disease-fighting white blood cells in the udder and are far more effective than loops with smooth surfaces that were tested several years ago.
Milk Secretion and Mastitis Lab., Beltsville, MD
Max J. Paape, (301) 344-2303

SHEEP UDDER DISEASE WAS ISOLATED FOR THE FIRST TIME in about 5 to 10 percent of range ewes in some Oregon and Idaho flocks. Microscopic lesions, characteristic of the virus-caused "firm udder disease," lower ewes' milk production so they must be culled, since they cannot produce enough milk for lambs. Ewes inoculated with the virus, however, failed to exhibit the classical symptoms of the disease. Research is continuing, but findings so far are a crucial first step in eventually controlling the disease.
Animal Disease Research, Pullman, WA
Scott Adams, (509) 335-6022

A VACCINE CONTAINING KILLED BLUETONGUE VIRUS that has been irradiated protects sheep from the disease when given in two sequential doses. Further research is under way to determine the optimal dose of radiation needed to inactivate the virus and stabilize the vaccine for storage as well as the optimal dose needed to immunize sheep. The new vaccines are safer to livestock than those that use live virus. They protect sheep against two of the five strains of the disease. Bluetongue costs farmers more than $30 million annually in losses.
Animal Disease Research Center, Plum Island, NY
Charles H. Campbell, (516) 323-2500

SYSTEMIC INSECTICIDE REDUCES EFFECTS OF BLUETONGUE disease of sheep. A single treatment with famphur, an experimental insecticide, can be applied while routinely handling animals before bluetongue season in fall. Famphur cannot prevent infection of bluetongue virus, but treated sheep show no symptoms of the disease--mouth sores, lameness, and abortions. The virus is spread by biting gnats.
Arthropod-borne Animal Disease Research, Denver, CO
Frederick R. Holbrook, (303) 234-2474

A POISON PLANT MAY CAUSE LAMB LOSSES OF 50 PERCENT in the Pacific Northwest when grazed by pregnant ewes. The toxic weed, called false hellebore, has been known to cause deformities in lambs. Now agency scientists suspect the plant may cause ewes to abort or lambs to die right after birth, depending on when during their pregnancy ewes eat the plant. Sheep deaths from eating poisonous plants cost ranchers over $10 million annually.
Poisonous Plant Res. Lab., Logan, UT
Richard F. Keeler, (801) 752-2941

CATTLE POISONED BY EATING TOXIC PLANTS for a short period may get sick and die many months later. Cattle fed three plants containing a chemical called pyrrolizidine alkaloids showed no immediate signs of poisoning; however, many months later they developed the classical symptoms and soon died. The discovery helps to explain why cattle sometimes are unproductive or die from undiagnosed causes.
Poisonous Plant Res. Lab., Logan, UT
A. Earl Johnson, (801) 752-2941

CROP UTILIZATION & POST-HARVEST TECHNOLOGY RESEARCH

ENZYMES IN CEREAL GRAINS are inactivated by heating so that they can be milled into flavor-stable, high-fat flours with texture and functional properties equal to those of fresh or degerminated flours. The process, for which a patent is being sought, inactivates peroxidase and lipase enzymes in corn, wheat, oats, rice, sorghum, millet, barley and rye. It retains natural oxidants and the germ, which is rich in nutrients.
Field Crops Post-Harvest Research, Peoria, IL
George N. Bookwalter, (309) 685-4011, Ext. 419

A QUICK AND EASY WAY TO MEASURE SALT IN HAMS and other processed meats has been developed by agency scientists. The new instrument has been developed to measure sodium chloride content by reflecting near-infrared light off these meats. Food processors and meat inspectors may use the new method to help keep down salt levels.
Instrumentation Lab., Beltsville, MD
Karl H. Norris, (301) 344-3650

A NEW PROCESS prevents free fatty acid formation on rice bran during storage. This opens up a new source of edible oils in rice-growing countries where domestic edible oil is in short supply. Without this process, the high level of free fatty acid formation in unstabilized rice bran makes extraction of edible oil too costly. India has signed a contract with the United States for use of the process.
Western Regional Research Center, Albany, CA
Robert Sayre, (415) 486-3821

CRACKED EGGS that now escape detection in packing plants can be discovered quickly by running them through a staining machine designed by an ARS engineer. The machine sprays eggs with a stain, then washes them off. Hairline cracks show up in blue. Cracked eggs can still be used in shelled-egg industries.
Russell Agricultural Research Center, Athens, GA
James A. Dickens, (404) 546-3531

FERMENTATION OF CORN dry-milled fractions to ethanol yields distillers' grains that are potentially superior to corn distillers' grains. The by-products from the fermentation of corn grits and flours contain more protein but less fat and fiber than contained in corn distillers' grains. Lower fiber content may be desirable in baby foods. Lower fat content may offer better taste and more stability in storage.
Northern Regional Research Center, Peoria, IL
Y. Victor Wu, (309) 685-4011, Ext. 328

DRY-MATTER AND SWEETNESS OF ONIONS are measured with a new instrument that uses spectrophotometry, a process that exploits the interaction of chemicals and light. The instrument can separate onions high in dry-matter from those low in dry-matter, permitting the low-dry-matter onions, which spoil more quickly, to be marketed first. The "onion meter" can also screen onions for desired qualities for breeding purposes.
Quality Evaluation Res. Lab., Athens, GA
Gerald Dull, (404) 546-3320

BITTERNESS IN GRAPEFRUIT JUICE and the juice of navel oranges can be greatly reduced and the flavor improved by a process that relies on polymers made from simple sugars. The sugars are used as packing in a column through which whole juice is passed.
Citrus and Subtropical Products Lab., Winter Haven, FL
Robert Berry and Philip Shaw, (813) 293-4133

A NEW SUNFLOWER SYNTHETIC (a diverse collection of seeds selected for one common characteristic) that is high in oleic acid has been released cooperatively by ARS and North Dakota State University to breeders and industry. High oleic sunflower hybrids may be derived from this material in the future. Sunflower oil high in oleic acid can be heated to a higher

temperature without smoking, frying food, like potato chips, faster. The oil also can be used longer.
Oilseeds Res. Lab., Fargo, ND
Jerry F. Miller, (701) 237-7728

A PRIVATE FIRM, the Mycogen Corporation of San Diego, CA, has applied for an exclusive license to develop, manufacture, and market the ARS-invented Mycoherbicide Pelletizing Process. The system can be used in applying microbial-based pesticides.
Southern Weed Science Lab., Stoneville, MS
Wm. Connick, Lynn Walker, Paul Quimby, Jr., (601) 686-2311

SOFTNESS WITH INNER STRENGTH is the idea behind a new way of blending fabrics developed by ARS scientists. The material, called "filament-core," combines the best qualities of cotton and polyester in a new way. Instead of combining short, chopped strands of cotton and polyester, cotton fibers are wrapped completely around a continuous filament of polyester. The fabric has the feel of 100% cotton with the strength and durability of polyester. Several commercial companies have expressed interest in the process.
Special Products Lab., New Orleans, LA
Robert Harper, (504) 589-7561

HUMAN NUTRITION RESEARCH

FOLIC ACID CONTENT OF FOODS can be assayed in half the time it used to take--and with less chance of human error--with an automated, computerized technique recently developed by ARS. Folic acid, a B-complex vitamin, is used in the treatment of nutritional anemias and of sprue, a chronic deficiency disease.
Western Regional Research Center, Albany, CA
Pamela M. Keagy, (415) 486-3193

LARGE DOSES OF FOLIC ACID CAN BE HARMFUL to pregnant women and to persons on zinc-deficient diets. A nutrition study showed that too much folic acid, an ingredient in vitamins, increased the incidence of maternal infection, fetal distress, and other complications. Males need only about 200 micrograms of folic acid a day, rather than the 400 micrograms currently listed as the recommended daily allowance. Either amount can be safely consumed by eating foods, like liver, beans, nuts and green leafy vegetables that are rich in natural folic acid.
Grand Forks Human Nutrition Research Center, Grand Forks, ND
David B. Milne, (701) 775-8353

NEW PORTABLE METHOD TO MEASURE TOTAL BODY FAT is faster and more accurate than measuring skinfold--the most commonly used method. Called infrared interactance, the method uses near-infrared light to estimate the percentage of body fat in humans. Scientists are testing this easy and harmless method for use by physicians, dietitians, athletes, and agencies involved in Third World development.
Energy and Protein Nutrition Lab., Beltsville, MD
Joan M. Conway, (301) 344-2977

A ONE-YEAR STUDY OF PEOPLE'S EATING HABITS, the first of its kind, raises new questions about how nutritional values have been traditionally measured. For example, when trained subjects were asked to record their food intakes, they repeatedly reduced the amount they normally ate by about 18 percent. The 12-month study monitored the intake of calories and 19 nutrients by 28 men and women in the Washington area. Typically, nutritional studies last only a few weeks.
Human Nutrition Research Center, Beltsville, MD
Dr. Walter Mertz, (301) 344-2157

YOGURT MAY HELP ALLEVIATE GASTROINTESTINAL INFECTIONS when the fermented milk is eaten by people whose vitamin and mineral levels are normal. Scientists are looking into this milk product's remarkable effects. Expanding the market for yogurt will help use surplus milk as well as provide a major

source of calories and protein for the world's poor and undernourished, who are most susceptible to intestinal infections.
Protein Nutrition Lab., Beltsville, MD
Anthony D. Hitchins, (301) 344-2331

EXPERT SYSTEMS RESEARCH

A NEW COMPUTER PROGRAM will help provide increased protection for soil in the grain-farming region of the Pacific Northwest. Using air temperature records of prior years, the model estimates for farmers the latest possible fall seeding date that will provide enough crop cover to keep down soil losses from erosion.
Columbia Plateau Conservation Res. Center, Pendleton, OR
Ronald W. Rickman, (503) 276-2811

GLYCIM, A COMPUTER MODEL, simulates soybean growth under a variety of conditions. It summarizes what is known about the physical and physiological processes involved in the movement of water, carbon, nitrogen, oxygen, and other materials in the plant, soil, and atmosphere. It also predicts the number and size of organs on the plants, their response to their environment, and final yield.
Crop Science Research Lab., Mississippi State, MS
Basil Adcock, (601) 325-2311

SIGNIFICANT ACCOMPLISHMENTS DURING 1984

Dr. KINNEY. As indicated in my complete statement, during 1984 we demonstrated a new technique for controlling the boll weevil, a nonslaughter test for trichinosis in swine, a new technique of land management, slot mulching to stop soil erosion on fragile land, some alternatives to EDB, and new soybean varieties that are resistant to disease. New vaccines for brucellosis are now being field tested.

These accomplishments, Mr. Chairman, are not the result of 1 year of research, but as you well know, it is the payoff for many years of multidisciplinary research. Our significant accomplishments have been summarized in an ARS publication that has just come off the presses in the last couple of days entitled, "Research Progress in 1984." I will provide, for the committee, copies of this report. I think you will find them very interesting.

As part of our priority setting process, Mr. Chairman, we visit with many industry and commodity groups to hear their needs to help us set priorities. Last year, the national program staff and others at headquarters met with about 150 such groups in planning or listening sessions. I personally met with 30 of these groups and, if it pleases the chairman, I will submit a list of these industry and commodity groups that we met with in fiscal year 1984.

Mr. Chairman, this concludes my remarks. I will be pleased to respond to any questions at the appropriate time.

Senator COCHRAN. Thank you, Dr. Kinney. We will make the list a part of the record.

[The information follows:]

INDUSTRY/COMMODITY GROUP CONTACTS

Industry/Commodity Groups

Alfalfa Crop Advisory Committee
Agricultural Research Institute
American Dry Pea and Lentil Association
American Farm Bureau
American Honey Producers Association
American Mushroom Institute
American Nurserymen Association
American Seed Trade Association
American Society for Testing Materials
American Soybean Association
American Textile Manufacturers Association
Anderson Clayton
Apple (Ad Hoc) Crop Advisory Committee
Arthur D. Little
Barley Crop Advisory Committee
Battelle Northwest
Beet Sugar Development Foundation
Brattle Research
California Citrus Quality Council
California Prune Board
California Raisin Advisory Board
Campbell Soup
Carya (Pecan & Hickories) Crop Advisory Committee
Ciba-Geigy
Citrus (Ad Hoc) Crop Advisory Committee
Clover & Special Purpose Legumes (CSPL) Crop Advisory Committee
Conservation Tillage Information Center
Cotton Inc.
Cotton Crop Advisory Committee
Crop Advisory Committee on Sugarcane
Del Marva Poultry Industries
Dickey-john
Dupont
Eastman Kodak Corporation
E. I. duPont de Nemours
Farmland Industries
Farm and Industrial Equipment Institute
Fertilizer Institute
Florida Citrus Commission
Florida Citrus Mutual
Florida Citrus Packers
FMC Corporation
Food Protein Council
Friends of the National Arboretum
The Futures Group
Georgia Pecan Growers Association
Gold Kist
Grasses Crop Advisory Committee
Hawaiian Sugar Planters' Association
Idaho Wheat Growers
Infant Formula Council

Institute of Food Technologists
Institute of Shortening and Vegetable Oils, Inc.
Intelligenetics
Irrigation Association
International Commission on Irrigation and Drainage
John Deere & Co.
Land Improvement Contractors of America
Lincoln Diversified Systems, Inc.
Livestock Conservation Institute
Maine Potato Industry
Maine Potato Sales Association
Maize Crop Advisory Committee
Merck & Co.
Mobay
Monsanto
National Arboretum Advisory Council
National Agricultural Chemicals Association
National Association of Conservation Districts
National Broiler Council
National Cattlemen's Association
National Cotton Council
National Cotton Council Bollworm Committee
National Cottonseed Products Association
National Crushed Stone Association
National Dairy Federation
National Dairy Herd Improvement Association
National Food Processors Association
National Grange
National Limestone Institute
National Milk Producers Federation
National Oat Improvement Council
National Peach Council
National Peanut Association
National Pork Producers Council
National Soybean Crop Improvement Council
National Sunflower Association
National Swine Improvement Federation
National Swine Identification Task Force
National Turkey Federation
National Wheat Improvement Committee
National Wool Growers
Northwest Wheat Growers Association
North American Mango Importers Association
North American Strawberry Growers Association
Oat Crop Advisory Committee
Ocean Spray Cranberries, Inc.
Papaya Administrative Committee
Peanut Crop Advisory Committee
Peanut Industry
Pert Laboratories
Phaseolus Crop Advisory Committee
Pickle Packers' Association

Pioneer
Pioneer Hi-Bred International, Inc.
Potash and Phosphate Institute
Potato Crop Advisory Committee
Poultry and Egg Industry
Poultry Egg Institute
Poultry Processors' Association
Procter & Gamble Company
Prunes (Stone Fruits) (Ad Hoc) Crop Advisory Committee
R. J. Reynolds Industries' Agriculture Technical Advisory Group
Ralston Purina
Red River Valley Potato Growers Association
Rice Crop Advisory Committee
Rodale Press
Root & Buld (Ad Hoc) Crop Advisory Committee
Small Fruits Crop Advisory Committee
Soap & Detergent Association
Society of American Florists
Southeastern Peanut Association
Soybean Crop Advisory Committee
Stauffer Chemical
Sugarcane Crop Advisory Committee
Sugarbeet Crop Advisory Committee
Sugarbeet Development Foundation
Sunflower Crop Advisory Committee
Sweet Potato Crop Advisory Committee
Symbolics Corp.
Tanners Council of America
Texas Citrus Mutual
3M
Tom's Foods
Union Carbide
United Egg Producers
United Fresh Fruits Association
U.S. Importers of Mexican Citrus
U.S. Animal Health Association
Vigna (Cowpea) Crop Advisory Committee
Vine Crop Advisory Committee
Vitus (Grapes) (Ad Hoc) Crop Advisory Committee
Walnut Crop Advisory Committee
Washington Apple Commission
Washington Wheat Growers
Western Industries, Inc.
Wheat Crop Advisory Committee

COOPERATIVE STATE RESEARCH SERVICE

Dr. BENTLEY. Dr. Jordan.

Dr. JORDAN. Thank you very much, Dr. Bentley and Mr. Chairman. It is a pleasure to be back before you again.

As you know, the Cooperative State Research Service is the science and education agency through which Federal research funding and planning are accomplished on behalf of the Department of Agriculture in cooperation with 58 State and territorial agricultural experiment stations; 17 colleges of 1890, including the Tuskegee Institute; 28 schools of forestry; 29 colleges of veterinary medicine; and some other universities that are not land-grants. Most of these institutions, however, are associated with land-grant universities.

When all the publicly supported agricultural research is taken into account, including all research agencies within the Department of Agriculture, two-thirds of the full-time equivalent scientist-years are found in the State Agricultural Experiment Station system. Because of shared responsibilities for research and teaching, the number of individuals is really quite large—in fact, about 12,500 scientists overall. This provides a wide range of talent capable of addressing most kinds of problems facing agriculture.

Analysis of the most recent data shows that the efforts of scientists across the entire agricultural research system, including the USDA laboratories, are directed to the following areas: About 37 percent is focused on crops research; 20 percent, animal research; 13 percent in forestry; another 11 percent in other natural resources; competition and trade accounts for 7 percent; food science and human nutrition, 5 percent; and all other areas, including rural development, account for 7 percent.

Funding for the total research effort that is put forth by the State Agricultural Experiment Station system, as you appreciate, comes from several sources. Again, the most recent data show the following distribution: 53 percent comes from State appropriations; add to that another 6 percent from product sales; the Cooperative State Research Service is the conduit for 19 percent of the funding for an average station; industry and other non-Federal foundations are 10 percent; other USDA agencies, particularly the Agricultural Research Service, the U.S. Forest Service, and the Economic Research Service, account for 3 percent; and finally, all other Federal agencies, particularly the National Science Foundation, the National Institutes of Health, and the Departments of Interior and Commerce, account for the final 9 percent.

Each source of funding fills a specific niche, but the base funding for the entire system comes from the combination of the State-appropriated funds and formula funds from CSRS.

Peaks of excellence, Mr. Chairman, and focused productivity can be accomplished by using all the other sources of funding including competitive research grants, special research grants, or private foundation funding.

RESEARCH ACCOMPLISHMENTS

We have provided you with reports on both competitive and special research grants, but for the moment, Mr. Chairman, I would like to focus on base or formula funding to show how it has been combined with the other sources of funding to produce the desired results.

Mr. Chairman, I am sure you are aware that Church's Fried Chicken has just signed a contract with the Mississippi catfish farmers to market, over the next 18 months, an amount of fish up to 30 percent of the State's production that was recorded in 1984.

Since there will be no losses of other markets, this will effectively cause catfish production in Mississippi to increase no less than 15 percent and perhaps as high as 30 percent. This will mean $40 million in additional farm production in an industry that had no market value in the State of Mississippi as short a time ago as 1974.

Scientists at Mississippi State University have been involved in every step of the process including breeding and genetics, fish culture and fish diseases, as well as processing and marketing of the finished product. This is a superb example of the marriage of State, Federal, and private industry funds and efforts for a common cause.

Further, it is an excellent example of the meshing of formula funds with State funds, special research grants, and other competitive grants to yield the desired results.

As another example, farmers in Nebraska tell me that one of the research programs conducted at the University of Nebraska that has had a major impact in recent years is the study of ecofallow. It is a technology that emerged from studies of tillage practices that were devoted to developing minimum tillage and no tillage techniques.

Overall, however, by adopting this procedure across the State—and it has been well accepted by the farmers in the Great Plains—this technique will mean an increase in farm income of $78 million for Nebraska, and when adopted by the neighboring State of Kansas, sir, it will mean one-quarter of a billion dollars' increase for Kansas.

Ecofallow also allows farmers to harvest two crops in 3 years instead of two crops in 4 years as with traditional fallow methods.

Mr. Chairman, major advances are being made in biological control of pests. Scientists at the University of Florida have been studying biological control of the mole cricket. That is the cricket that burrows into the soil and eats the root systems of forages, pastures, lawns, and golf courses.

There is a parasitic wasp that has been studied in Fort Lauderdale since 1981. It seems to be quite effective as a control mechanism. Its distribution seems to be rather controllable, too. Over that timeframe, it has moved out about 2 miles from where it was originally released.

Alternate methods are also being studied in concert with scientists in Brazil and Uruguay. These techniques involve the use of a nematode and also a pathogenic bacteria as approaches. In the latter case, several strains of bacilli caused mortality in mole crickets within 24 hours after exposure.

Cooperation with ARS scientists and scientists in Brazil has brought forth a very promising biological control over the red fire ant. Earlier experiments with chemical control of the fire ant had short-term beneficial effects, because it kills the predators of the fire ant.

The entire fire ant problem has been modeled and studied extensively and now we find a subterranean ant that parasitizes colonies of fire ants. It perhaps is the most promising of all the approaches that we have been looking at in the State system.

When studies are completed in Brazil, the question of the probable importation of this predator ant into the United States will be assessed. Incidentally, this is one of a half dozen projects done cooperatively between ARS and the University of Florida.

ICE-NUCLEATING GENE RESEARCH

A final example is a set of experiments that are still in progress, Mr. Chairman. Specifically, I would like to report on the ice-nucleating gene research at the University of California.

As you know, much frost damage in plants is caused by an ice nucleative bacteria. What it has in it, sir, is a chemical substance within its genetic makeup that assists in nucleating or forming ice crystals, so they are formed rather quickly at temperatures of 32, 33, or even 34 degrees Fahrenheit.

By removing that part of the gene, you can take plants, vegetables, or fruits and expose them to temperatures of 30 degrees for several days and even down to 24 degrees for shorter periods of time, for a couple of hours or more.

I don't have to tell you, Mr. Chairman, what the benefits of being able to carry this to conclusion will bring to the farmers of the United States. Just take a look at the citrus farmers and the vegetable farmers over the southern tier of States for the past couple of years.

Other reports of research results have been provided to the committee in the form of magazines produced by the individual State Agricultural Experiment Stations.

FISCAL YEAR 1986 BUDGET REQUEST

I would like now to turn to my comments on the budget recommendations for CSRS for fiscal year 1986. It is a little over one-quarter of a billion dollars. We feel that even with the need to reduce spending, this budget continues strong support for a State-Federal partnership in food and agricultural research.

The agency has experienced an $83.4 million increase in research funding from 1981 to 1985. In the spirit of supporting the national effort to control expenditures and reduce the national debt, the administration has placed high priority in maintaining support for base funded programs. Therefore, these base programs have been maintained at level funding.

The Hatch Act, the McIntire-Stennis Cooperative Forestry Act, the Evans-Allen Program at the 1890 colleges and Tuskegee Institute, are the formula-funded base programs that constitute the core of the State-Federal research partnership. When these formula programs are put together with State funding, they provide the basic laboratory facilities, support for scientists, graduate students, and other necessary support for the long-term stability of agricultural research. This will continue to allow maximum flexibility at the individual station level to support research of the highest priority problems and further ensure a continued strong working relationship between the USDA and the State Agricultural Experiment Station system.

Because of the high priority placed on reduced spending in 1986, the Competitive Research Grants Program, which was increased markedly in 1985, will be maintained at the fiscal year 1985 level, including the new areas of biotechnology, animal science, and pest science. This will encourage traditional and new cooperators to conduct basic research at the frontier of science.

It is proposed that funding for the 1890 Research Facilities Program be funded at the fiscal year 1985 level. This will provide the fourth year of a funding program of 5 years and $50 million to upgrade facilities at these institutions. Mr. Chairman, I hope you have had an opportunity to see the effect of this program. I visited, personally, four of these institutions. It makes a great difference in their capacity to produce needed knowledge.

In line with the administration's overall reduction in Federal spending, no funding has been recommended for the Special Research Grants Program. This grant program has concentrated on problems of national interest beyond the normal basis in the formula programs. Due to the discretionary nature of the Hatch Act formula and related base-funded programs, amounts allotted to the State institutions permit the institutions to fund research in those areas that they identify as the highest priority and supplement that with a competitive grants program.

In fiscal year 1985, the Higher Education Program was transferred to the Cooperative State Research Service and is administered by Dr. Kendrick through the Office of Grants and Program Systems. In fiscal year 1986, the budget proposes no funding for the Morrill-Nelson Program or for the graduate fellowships.

Support for the strengthening grants in the historically black land-grant institutions is included. Further support for the development of agricultural expertise will continue to be provided indirectly through the provisions of the Hatch Act formula and related base-funded programs as well as the Competitive Research Grants Program.

NATIONAL BIOLOGICAL IMPACT ASSESSMENT PROGRAM

The system will, however, break new ground in fiscal year 1986. It will use some existing resources to address high priority needs. Among these needs is the establishment of a National Biological Impact Assessment Program which is essentially a nationwide system for assessing biological change. This plan emerged from the Committee on Biotechnology of the Division of Agriculture of the National Association of

State Universities and Land-Grant Colleges. Basically it builds on the existing research expertise that has been conducting an assessment program for plants, animals, and microbes for many, many years.

The difference is that the data will be pooled and put into the most beneficial format possible. The data will meet public, private, and industrial needs. It will provide not only an inventory of the highest quality scientists that can be drawn on for review of proposals and review of protocols within proposals, but it will also provide a complete inventory of test sites, including the experiment stations and their branch stations and also biological stations that are built and conducted by nonland-grant institutions—Harvard and the University of Oklahoma are two that come to mind. This will allow, by knowing all the details of those sites, selection of the ideal site for testing some of the new biotechnology-developed organisms.

The net result is that the National Biological Impact Assessment Program will be an important factor in assuring the public of a safe, new biotechnology and biotechnology products.

In conclusion, through the farm bills of 1977 and 1981, the regional and national planning system which has been in development since the mid-sixties has become a matter of law. These planning efforts have brought the State Agricultural Experiment Station system, the Agricultural Research Service, and other agricultural research organizations together in a closer working relationship and also with our counterparts in the Cooperative Extension Service.

Furthermore, the system strengthens the establishment of priorities on a State, regional, and national basis. This is particularly significant when programs are expanded or constrained, thereby permitting the best output for research dollar invested to be achieved.

Mr. Chairman, this concludes my prepared remarks. My colleagues and I stand ready to answer your questions.

I would like to introduce two people who are here from the State Agricultural Experiment Station system: Dr. Leo M. Walsh, dean of the College of Agriculture and Life Sciences and director of Wisconsin Agricultural Experiment Station, and Dr. Bobby R. Eddleman, professor and economist, Mississippi State Agricultural Experiment Station, who is director of National and Regional Research Planning, Analysis, and Evaluation for the State Agricultural Experiment Stations.

Senator COCHRAN. Thank you, Dr. Jordan.

Dr. BENTLEY. Thank you. The comments on the Competitive Research Grants Program are included as a part of the formal statement by Dr. Jordan, and therefore, Dr. Kendrick won't have a formal statement. At the appropriate time, he will be available for questioning.

[The statement of Dr. Jordan follows:]

STATEMENT OF DR. JOHN PATRICK JORDAN

Mr. Chairman and Members of the Subcommittee: I am Dr. John Patrick Jordan, Administrator of the Cooperative State Research Service (CSRS). CSRS is the Science and Education agency through which Federal research funding and planning are accomplished on behalf of the Department of Agriculture in cooperation with:

- 58 State and Territorial Agricultural Experiment Stations;
- 17 Colleges of 1890, including Tuskegee Institute;
- 28 Schools of Forestry; and
- 29 Colleges of Veterinary Medicine.

Most of these institutions are associated with the Land-Grant universities. When all of publicly supported agricultural research is taken into account, including all research agencies within the United States Department of Agriculture, two thirds of the full-time equivalent scientists years are found in the State agricultural experiment station system. Because of shared responsibilities between research and teaching in the universities, the actual number of scientists is far larger. This provides a wide range of talent capable of addressing most kinds of problems faced by agriculture.

Analysis of the most recent data shows that the efforts of scientists across the entire agricultural research system, including the USDA laboratories, directed toward specific program areas are:

Crops	37%	Competition and Trade	7%
Animals	20%	Food Science, Human Nutrition	5%
Forestry	13%		
Natural Resources	11%	All Other	7%

Funding for the total research effort put forth by the State agricultural experiment station system comes from several sources, and the most recent data show the following distribution:

State Appropriated	53%	Industry and Other	10%
CSRS Appropriated	19%	Other USDA	3%
Product Sales	6%	Other Federal	9%

Each source of funding fills a specific niche, but the base funding for the entire system comes from the combination of State appropriated funds and formula funding from CSRS. Peaks of excellence and focused productivity can be accomplished by using all other sources of funding. This allows the sponsor of a specific research project to have a clear and definite role on what is done with the money provided.

We have provided you with reports on the results from both Competitive and Special Research Grants. For the moment, however, I would like to focus on the base or formula funding to show how it has been combined with other sources of funding to produce the desired results.

Mr. Chairman, I am sure you are aware that Church's Fried Chicken has just signed a contract with the Mississippi catfish farmers to market, over the next 18 months, an amount of fish equal to 30% of the State's production recorded for 1984. Since there will not be losses in other markets, it will effectively cause catfish production in Mississippi to increase by 30%. This will mean $40 million in additional farm production in an industry that had no market value in the State of Mississippi in 1974. In a decade we have watched it move through the cottage industry stage to a full-blown industry which will be larger than pork and milk production for the State. The impact on the State of Mississippi will also be seen in the form of nearly six hundred new jobs in the catfish processing industries alone, including feed manufacturing and processing plants. More importantly, indirect employment in related industries and on catfish farms would increase by nearly 2,400 jobs. The capital investment in facilities and equipment required to produce and process 45 million pounds of farm-raised catfish exceeds $50 million.

Scientists at Mississippi State University have been involved in every step of the process, including breeding and genetics, fish culture, fish diseases, and processing and marketing of the finished product. This is a superb example of the marriage of State, Federal and private industry funds and efforts. Further, it is an excellent example of the meshing of formula funds with State funds, Special Research Grants and other competitive grants to yield a desired result.

Farmers in Nebraska tell me that one of the research programs conducted at the University of Nebraska, that has had enormous impact in recent years has been the study on ecofallow. It is a technology that emerged from studies of tillage practices that were devoted to developing minimum tillage and no tillage techniques. Furthermore, it minimizes the costs and impacts associated with agricultural chemicals and the costs of fuels needed to run farm machinery in traditional tillage practices. Scientists at the University of Nebraska estimate that the net result of the technique has been to reduce the cost per bushel by 78¢ or 20%. This technique will mean an increase in farm income of $78 million for Nebraska and a quarter of a billion dollars for Kansas. Ecofallow also allows farmers to harvest two crops in three years instead of two crops in four years as with traditional fallow methods.

Mr. Chairman, major advances are being made in biological control of pests. Scientists at the University of Florida have been studying biological control of the mole cricket, which burrows into the soil and feeds on the root system of forages, pastures, lawns, and golf courses. A parasitic wasp has been studied at a site in Fort Lauderdale since 1981. The parasitic wasp seems to be doing its job and has extended its range about two miles from the original release site. Alternate control measures are being studied in concert with scientists in Brazil and Uruguay, involving a nematode and also a pathogenic bacterium. In the latter case, several strains of bacilli cause mortality in mole crickets within 24 hours of exposure.

Cooperative work with ARS and scientists in Brazil has brought forth a very promising biological control for the red imported fire ant. Earlier experiments with chemical control of the fire ant have had only short-term beneficial effects because it kills other predators of the fire ant. The entire fire ant problem has been modeled and studied extensively. A subterranean ant that parasitizes colonies of fire ants shows the most promise. When studies are completed in Brazil, the importation of this ant for use in the United States will be addressed. Incidently this is one of a half dozen projects done cooperatively between ARS and the University of Florida.

A final example is a set of experiments still in progress. Specifically, I would like to report on the ice-nucleating gene. Much frost damage to plants is caused by "ice-nucleation active" bacteria. The microscopic bacteria promote the formation of ice crystals. Plants covered with these bacteria freeze and are damaged or killed at temperatures as much as nine degrees Fahrenheit higher than plants without them. A chemical product of one strain of bacteria acts as a starter crystal around which frost can form.

Through experimentation, the genes that cause the bacteria to have the ice-nucleating ability have been isolated. Using recombinant DNA techniques, the sequence of genes causing the problem is excised, leaving the bacteria intact and otherwise identical. The engineered bacteria, when applied to crops, will replace the ice-nucleating bacteria, lower the plants' freezing points and thus prevent frost damage. This process could save U.S. farmers up to $1 billion a year in losses due to frost damage. It will be particularly helpful on fruits and vegetables. Had this bacteria been available for use in the field over the last two years, it would have reduced significantly the enormous losses suffered by the citrus industry.

Recombinant DNA, or "gene splicing" techniques, initially found practical use in the manufacture of pharmaceutical products like insulin and human growth hormone. Now, agriculture can profit from this technology. With genetic engineering, plants may be able to provide more nutrition, repel insect pests or survive in salty water. Engineered microbes may someday help wheat plants provide their own nitrogen or combat specific diseases.

The President's Cabinet Council on Biotechnology recently drafted a set of regulations that will provide the safeguards to assure the citizens of America that genetically engineered or chemically treated organisms that may have upon rare occasion the potential of being dangerous will not be introduced into the environment.

The budget recommendation for CSRS for fiscal year 1986 is $251.2 million. We feel that even with the need to reduce spending, this budget continues strong support for the State/Federal partnership in food and agriculture research. The

Agency has experienced an $83.4 million increase in research funding from 1981 to 1985. In the spirit of supporting the national effort to control expenditures and reduce the national debt, the administration has placed high priority on maintaining support for the base funded programs. Therefore, these base programs have been maintained at level funding. The Hatch Act, McIntire-Stennis Cooperative Forestry, and Evans-Allen program at the 1890 Colleges and Tuskegee Institute are the formula funded base programs that constitute the core of the State/Federal research partnership. When these formula programs are put together with State funding, they provide the basic laboratory facilities, scientists, graduate students, and support necessary for the long term stability of agricultural research. This will continue to allow maximum flexibility at the individual station level to support research on the highest priority problems and further assure a continued strong working relationship between the USDA and the State agricultural experiment station system.

Because of the high priority placed on reduced spending in 1986, the Competitive Research Grants program will also be maintained at the fiscal year 1985 level. The efforts which expanded markedly in 1985 will be continued in biotechnology, animal science and pest science in the Competitive Research Grants program. This will encourage traditional and new cooperators to conduct basic research at the frontiers of science.

It is proposed that funding for the 1890 Research Facilities program be continued at the fiscal year 1985 level. This will provide the fourth year of funding for the five year $50 million grant program to upgrade facilities at these institutions.

In line with the Administration's overall reductions in Federal spending, no funding has been recommended for the Special Research Grants programs. These grants programs have concentrated on problems of national interest beyond the normal emphasis in the formula programs. This specific funding support for these programs will be eliminated. Due to the discretionary nature of the Hatch Act formula and related base funded programs, amounts allotted to State institutions permit the institutions to fund research in those areas that they identify as high priority. This flexibility can provide for maintaining the highest priority programs.

In fiscal year 1985, the Higher Education program has been transferred to the Cooperative State Research Service. Three higher education programs will be conducted -- the Morrill-Nelson Permanent Appropriation which provides $50,000 to every State and Territory; Strengthening Grants to support resident instruction programs at historically black land-grant institutions; and Graduate Fellowships awarded to colleges and universities to stimulate the development of food and agricultural scientific expertise in targeted national need areas. The fiscal year 1986 budget proposes no funding for the Morrill-Nelson program or for Graduate Fellowships. Support for the development of agricultural expertise will continue to be provided indirectly through the provisions of the Hatch Act formula and related base funded programs and the Competitive Research Grants program.

However, the system will break new ground in FY 1986. It will use existing resources to address high priority needs. Among these needs is the establishment of a National Biological Impact Assessment program, which is essentially a nationwide system for assessing biological change. This plan emerged from the Committee on Biotechnology of the National Association of State Universities and Land-Grant Colleges. Basically, it builds on the existing research expertise that has been conducting an assessment program of all plants, animals, and microbial biota for many years. The difference is that the data will be pooled, and put into a more beneficial format. The data will meet public, private and industrial needs.

The significance of this program is underscored by the increased number of genetically engineered organisms that are now used or are nearly ready for use by the agricultural industry. To ascertain the potential value as well as the safety and possible hazards of such products, a complete knowledge and inventory of the biota in any given area are necessary.

As a second component of the program, selected test sites will be examined in great detail, so that even varieties and sub-varieties of specific organisms will be catalogued. Thus, the ice-nucleating gene experiment proposed by the University of California could be conducted at a research station at which the relationship between the bacteria with and without the ice-nucleating capacity could be watched, monitored, and measured. These sites will allow for the field testing of genetic engineered organisms that are effectively "branded" or altered in a readily recognized way to do a specific task. Thus, one can determine the number and location of such organisms rather easily all over the country, indeed, all over the world. This National Biological Impact Assessment System will be an important factor in assuring the public of the safety of new biotechnology products.

In conclusion, through the Farm Bills of 1977 and 1981, the regional and national planning system became a matter of law. These planning efforts have brought the State agricultural experiment station system, the Agricultural Research Service and other agricultural research organizations together in a closer working relationship. Furthermore, the system strengthens the establishment of priorities on a State, regional, and national basis. This is particularly significant when programs are expanded or constrained, thereby, permitting the best output per research dollar invested.

Mr. Chairman, this concludes my prepared remarks. I will be very pleased to answer any questions.

EXTENSION SERVICE

Dr. BENTLEY. I would now like to return to reports from two other areas. One is the Extension Service and the other the National Agricultural Library.

As we begin this part of our presentation, I would like to call on Dr. Greenwood who is the administrator of the Extension Service.

Dr. GREENWOOD. Thank you, Dr. Bentley. Mr. Chairman, I appreciate this opportunity to appear before you this morning to discuss the Extension Service's proposed budget for fiscal year 1986. I am pleased to report that the Cooperative Extension System continues to be a strong, viable partnership involving the U.S. Department of Agriculture, State land-grant universities, and local governments.

This Federal-State-local partnership is entering its seventh decade. It continues to be the primary delivery source for our farmers and ranchers to receive information about the latest research on how to operate their farms, manage their businesses, and continue their standards of living.

Last year, this unique, informal, educational system, with its trained professionals in both 1890 and 1862 institutions and Tuskegee, reached over 103 million Americans.

Cooperative Extension touched their lives providing information, education, and training in areas of critical needs, from assisting families and farmers in the management of skills and financial resources, to the utilization of computer systems for farm and business management, to planning and maintaining nutritious diets for low-income families, to providing positive learning experiences for young people, to helping small communities plan for economic growth.

As Dr. Bentley referenced, U.S. agriculture is at a critical junction today. There is a deep concern in many sectors of the Nation over the financial conditions of the agricultural economy. I believe that the Cooperative Extension System can contribute in providing relief through educational assistance to American farmers and ranchers in these difficult times.

Our primary basis continues to be serving the needs of the Nation's agricultural community through up-to-date, research-based information, education, demonstration projects, and programs.

Mr. Chairman, during these times of fiscal restraint, Cooperative Extension has learned to adapt while remaining responsive to high priority needs of our clientele. This has been enhanced greatly by the cooperation and commitment of the private sector to programs of the Cooperative Extension System.

This is demonstrated by the 2.8 million volunteers who, with leadership and training provided by Extension professionals, helped to conduct extension programs in every State and every county in the United States. Their time and effort, calculated to be worth $4.5 billion annually, allow Cooperative Extension to reach a greater number of Americans with educational assistance.

FISCAL YEAR 1986 BUDGET

I will now speak briefly to the fiscal year 1986 budget. Our budget request totals $264.8 million or $78.9 million less than appropriated in 1985. Let me highlight a few aspects of this request.

First, the high priority for maintenance of our formula funded program, and second, the proposed termination of specifically targeted programs.

Due to the variability in the nature of the problems faced by the agricultural community in this country, each State is able to address the array of local, regional, State, or national problems rapidly and effectively through the use of formula funds.

Therefore, we are requesting that the formula funded programs carried out by our 1862 institutions, 1890 institutions, the Tuskegee Institute, and the District of Columbia be maintained at current levels to allow our State cooperators to continue to meet basic program needs of our clientele.

The reductions proposed for our specifically earmarked programs result from the need for fiscal restraint and are not a reflection of the effectiveness of these programs in meeting their goals. On the contrary, these programs have been successful to the extent that Smith-Lever formula funds are currently being utilized by some States to supplement these programs.

The proposed reduction for these programs will not necessarily result in totally eliminating program activities in these areas. High priority aspects of the program will be continued in some States. The proposed reductions in our earmarked programs will consist of elimination of the Expanded Food and Nutrition Education Program known as EFNEP, the elimination of the Pest Management Program, pesticide impact assessment, urban gardening, farm safety, and farm financial management assistance.

In addition, we propose the elimination of the $2.5 million available under the Renewable Resources Extension Act.

Mr. Chairman, we are proposing a very, very lean budget for fiscal year 1986. The priorities established will keep USDA as a partner within the Cooperative Extension System providing maximum flexibility through our cooperating institutions to continue to be effective extenders of knowledge needed by our Nation's food and agricultural communities.

That concludes my statement. I will be glad to respond to questions at the appropriate time.

Senator COCHRAN. Thank you, Dr. Greenwood.

[The statement of Dr. Greenwood follows:]

STATEMENT OF MARY NELL GREENWOOD

Mr. Chairman and members of the Subcommittee, I appreciate the opportunity to appear before you to discuss the Extension Service's proposed budget for FY 1986. I am pleased to report that the Cooperative Extension system, established in 1914, continues to contribute to a strong and viable partnership involving the U.S. Department of Agriculture, the State Land-Grant Universities, and local governments. This Federal-State-local partnership is entering its seventh decade, and it continues to be the primary delivery resource for our farmers and ranchers to obtain information about the latest research needed to operate their farms, maintain their businesses and continue their standards of living.

Last year, this unique and informal educational system, with its highly trained professionals in America's 1862 and 1890 Land-Grant Universities including Tuskegee Institute, reached over 103 million Americans. Cooperative Extension touched their lives, providing information, education and training in areas of critical need -- from assisting families in the management of scarce financial resources, to the selection of computer systems for farm and business financial management, to planning and maintaining nutritious diets for low-income families, to helping small communities plan for economic growth and an improved quality of life.

U.S. Agriculture is at a critical junction today. There is deep concern in all sectors of the nation over the financial condition of the agriculture economy. Congress will shortly be considering new farm legislation which will set basic farm policy for the next several years. The Administration has proposed in this legislation to move agriculture to a far more market-oriented environment. Extension Service will have to be there to help the producers and consumers.

I believe that the Cooperative Extension System can contribute in providing relief to American farmers and ranchers in these difficult and changing times. Our primary emphasis continues to be serving the needs of our Nations' agricultural community, through up-to-date and research-based information, education and demonstration projects and programs. Our challenge and commitment for the immediate and future years is to carry out our missions and goals with increased efficiency, through a relatively smaller resource base.

Mr. Chairman, during these times of fiscal restraint being experienced at all levels of government, Cooperative Extension has learned to adapt while remaining responsive to the high priority needs of our clientele. Essentially, this has been made possible by the cooperation and commitment of the private sector to programs of the Cooperative Extension system. This is demonstrated by the 2.8 million volunteers who, with leadership from Extension professionals, help to conduct extension programs in every State and County in the U.S. Their time and effort, calculated to be worth $4.5 billion annually, allows Cooperative Extension to reach greater numbers of Americans requesting assistance.

I would now like to discuss the budget we are proposing for FY 1986.

FY 1986 Budget

The 1986 Budget request totals $264,808,000, or $78,919,000 less than appropriated for FY 1985. This budget request supports the effort of this Administration to control government spending and to assist in addressing this country's Federal deficit crisis. I would like to briefly touch on two aspects of the FY 1986 budget request:

1) the high priority for maintenance of our formula funded programs; and
2) the proposed termination of all specifically targeted programs.

Due to the variability in the nature of problems faced by the agricultural community, each State is able to address the array of local, regional, and National problems more rapidly and effectively through the use of formula funds. Therefore, we are requesting that the formula funded programs carried out by our 1862 Institutions, 1890 Colleges, the Tuskegee Institute, and the District of Columbia be maintained at current levels to allow our State Cooperators to continue to meet basic program needs of our clientele.

Maintenance of these formula programs at current levels will allow our State cooperators to address other clientele requests, such as: conducting programs which utilize a systems approach in solving farm/ranch production and management problems; programs addressing financial management problems faced by both producers and families; programs dealing with strategies for competing in domestic and foreign markets; and programs on conservation and proper management of our diminishing soil and water resources.

The reductions proposed for our specifically earmarked programs result from prevailing fiscal constraints and are not a reflection of the effectiveness of these programs in meeting their goals. On the contrary, these programs have been successful to the extent that Smith-Lever formula funds are currently being utilized by many States on a regular basis to maintain or even supplement these programs. Thus, the proposed reductions for these programs will not necessarily result in eliminating program activities in these areas. In most cases, high-priority aspects of these programs will be continued in many States.

More specifically, proposed reductions in our earmarked programs will consist of:

> Total elimination of the food and nutrition education program known as EFNEP, $60,354,000; Pest Management, $7,531,000; Pesticide Impact Assessment, $1,716,000; Urban Gardening, $3,500,000; Farm Safety, $1,020,000; and Farm Financial Management Assistance, $1,000,000.

In addition, we propose total elimination of $2.5 million available under the Renewable Resources Extension Act, as well as Extension support for the Rural Development Centers ($500,000), Technology Transfer pilot projects ($350,000) and Farm Financial Management ($200,000).

In summary, Mr. Chairman, although we are proposing a lean budget in FY 1986, we believe that the priorities we established with our State cooperators will keep us as a viable partner within the Cooperative Extension system, and effective extenders of knowledge needed by the Nation's food and agriculture community to maintain efficient and profitable enterprises. I will be pleased to respond to your questions.

BIOGRAPHICAL SKETCH

Donald L. Stormer, Deputy Administrator, 4-H and Youth Development, ES

Donald L. Stormer was named Deputy Administrator, 4-H and Youth Development on April 1, 1984, by Administrator Mary Nell Greenwood. He received a Bachelor of Science degree with high honors from Michigan State University and a Master of Arts and Doctor of Education from the same institution. He has done post doctoral study in Administration, Supervision, and Management at Texas A&M University and North Carolina State University.

Dr. Stormer began his career as a teacher of Vocational Agriculture and holds a permanent teaching certificate in the public schools of Michigan. His Extension career began as a County 4-H Agent in Michigan. He later served as a 4-H Program Specialist at Michigan State University, a Youth Development Specialist and Associate Professor of Community Affairs at the University of Wisconsin, and State 4-H and Youth Leader and Associate Professor of Cooperative Extension Education at Texas A&M University. He came to the position of Deputy Administrator, 4-H and Youth Development from North Carolina where he served as Assistant Director and Extension State 4-H Leader and Professor of 4-H and Youth Development.

As Deputy Administrator, Dr. Stormer is responsible for nationwide leadership of the 4.4 million member 4-H program. The 4-H program is managed by the State Cooperative Extension Service and operated by 625,000 4-H volunteers.

NATIONAL AGRICULTURAL LIBRARY

Dr. BENTLEY. And now to Mr. Howard, of the National Agricultural Library.

Mr. HOWARD. Thank you, Dr. Bentley. Mr. Chairman and members of the subcommittee, I welcome this opportunity to appear before you to discuss the proposed fiscal year 1986 budget for the National Agricultural Library. I would like to introduce my associate director, Mr. Waters, who is in the rear of the room.

The National Agricultural Library has made considerable progress since 1982 when an interagency panel, commonly referred to as the Blue Ribbon Panel, investigated NAL at Secretary Block's request.

The report, which has served as NAL's blueprint for the future, found, among other things, that the library needed an additional $3 million a year and an additional 50 positions in order to provide basic services. Special programs would require additional funds.

While we still have a long way to go, we appreciate the support of many people and organizations. Chief among these are the Department of Agriculture, the Congress, and the libraries in the land-grant institutions.

We propose a fiscal year 1986 budget of $11.1 million or a decrease of $364,000 from the fiscal year 1985 amount of $11,464,000. Considering the President's priorities, we feel this budget, while we would like it a little higher, is a budget that NAL can support. I will be glad to answer questions at the appropriate time.

[The statement of Mr. Howard follows:]

STATEMENT OF JOSEPH H. HOWARD

Mr. Chairman and members of the Subcommittee, I welcome this opportunity to appear before you to discuss the proposed fiscal year 1986 budget for the National Agricultural Library (NAL). I would like to intruduce the Associate Director, Mr. Sam Waters.

The National Agricultural Library has made considerable progress since 1982 when an interagency panel -- commonly referred to as the "Blue Ribbon Panel" investigated NAL at Secretary Block's request. The report, which has served as NAL's blueprint for the future, found, among other things, that the LIbrary needed an additional 3 million dollars a year and an additional 50 positions in order to provide basic services. Special programs would require additional funds. While we still have a long way to go, we appreciate the support of many people and organizations. Chief among these are the Department of Agriculture, the Congress, and the libraries in the land grant institutions.

Some of our accomplishments are:

- Working with land-grant university libraries
- Cooperative cataloging
- Cooperative indexing
- Acquisitions, processing, preservation, and document delivery of state extension and agricultural experiment station publications.
- Artificial intelligence system for Integrated Reproductive Management for Dairy Cattle.
- Full text on-line of the Pork Industry Handbook.
- Agreement with the American Florists Endowment for the donation of $30,000 to the Library and $10,000 to the Associates of the National Agricultural Library to be used for organizing and distributing information on floriculture to growers, wholesalers and retailers in the floriculture industry.
- Donation of over 500 boxes of duplicate books and journals to the 1890 land-grant libraries and the Tuskegee Institute to improve collections.
- Arranging for donations of CRT terminals to the 1890 land-grant libraries and the Tuskegee Institute.

- Agreement with the USDA Office of International Cooperation and Developement (OICD), using PL 480 Special Foreign Currencies, to provide translations of foreign-language publications on agricultural science and technology to researchers.
- Agreement with the National Library of Medicine concerning the sharing of collection responsibilities in the area of veterinary science.
- Adopting a controlled vocabulary for the AGRICOLA database.
- Agreement with Aquatic Sciences and Fisheries Information System (ASFIS) stopping the duplication of indexing aquaculture literature.
- Investigating the feasibility of creating searchable full text databases from photocomposition tapes used to print USDA publications.
- Working with the Arid Lands Institute, University of Arizona to create a comprehensive database of citations relating to Guayule and Jojoba.
- Held a national 2-day meeting in Washington, D.C. for USDA field librarians and land-grant librarians.
- Completion of the solar energy system on the roof of the Library's 2-story wing under a demonstration grant from the Department of Energy's "Solar Energy in Federal Buildings Program."

We propose a fiscal year 1986 budget of $11,100,000 or a decrease of $364,000 from the fiscal year 1985 amount of $11,464,000.

The decrease of $364,000 for management savings includes an increase of $104,000 for annualization of fiscal year 1985 pay cost and decreases of $228,000 for management savings and $240,000 for a 5 percent pay reduction in fiscal year 1986.

Considering the President's priorities, we feel that this budget, while we would like it a little higher, is a budget that NAL can support.

Mr. Chairman, I will be happy to answer any questions that you might have.

IMPORTANCE OF RESEARCH AND EDUCATION PROGRAMS

Senator COCHRAN. Thank you very much, Mr. Howard. We appreciate your testimony. I am going to, at this time, recognize Senator Kasten for any questions he has. I know he is chairing another subcommittee. They have business to take care of, too. So I recognize you, Senator, for any questions you might have.

Senator KASTEN. Thank you very much. I would like to begin by saying that while I fully understand the need for spending restraint in Government programs across the board, I think that we must recognize that programs in research and programs in education have usually returned far more to society, and far more to our economy, than they have cost.

I think we have to be sure, in talking about slashing spending for these programs, that we are not at the same time doing serious damage to our research and education efforts for the sake of the relatively insignificant impact on the deficit.

I think most Senators, on both sides of the aisle, feel the way I do on this subject. For this reason, I don't believe that the administration is going to get all of the cuts that it is asking for in extension, research, and education. And frankly, I don't think they should.

These programs are good programs. Some reductions are going to be made, and should be made, in this as in other areas. We are going to work for making some reductions, but I don't believe that we are going to have the slashing cuts that are represented in the budgets of the Smith-Lever 3(d) and other programs.

EFFECTS OF NEW TECHNOLOGY ON MIDSIZED FARMERS

Dr. Greenwood, I just want to ask you one question. All of us in the Midwest are concerned about the survival of the midsized, full-time family farmers. They are threatened by a number of factors. One of these is the wave of new genetics and other kinds of new technology that is literally changing the face of agriculture. It is certainly doing this in the dairy industry.

Much of the new technology can best be taken advantage of by the larger operators, by the corporate farmers, all other things being equal. Some new technology is expensive. Some of the smaller farmers simply don't have the funds to acquire it or the time to become familiar with it.

What is the Extension Service doing now, and what can it do in the future to ensure that family farmers, as opposed to the large operators and the corporate farmers, will get a fair chance to take advantage of some of this new technology?

Dr. GREENWOOD. Mr. Kasten, as I indicated in my testimony, we do continue to have a high priority to extend research information and recent technology to farmers of all sizes. We do reach large numbers of medium-sized and small farmers. This is in the area of management, utilization of resources, and new crop and livestock technology.

Relating to the current farmer financial crisis: The Extension Service just recently completed a survey of 12 States, a number of which are in the north-central region, which shows that in the last 12 months, Extension had reached over 400,000 families with information in the area of financial management and helping them deal with the problems that they are currently facing in this time of crisis. We expect to reach substantially more farmers and families in the coming months as we continue our efforts to reach the medium-sized and small farmer.

Senator KASTEN. I don't care about the terminology. Do you understand my question?

Dr. GREENWOOD. Yes.

Senator KASTEN. Let me just use bovine growth hormone and embryo transplants as two examples of technological developments that will probably lead to major changes in the dairy industry. Now, what, specifically, are you doing to help the midsized dairy farmers take advantage of the progress that is almost revolutionary in some of these areas?

Dr. BENTLEY. Sir, I would like to comment on this. I agree with you. These are exciting developments. The impact of them will be hard for one to appreciate at this time. I think that the research—although I am not thoroughly familiar with the research and development—includes industrial involvement. And university involvement is very heavy, especially in the bovine growth hormone area.

I think the goal there is to develop a product that would be readily available to all sized farmers and all producers and that can be readily utilized in their production technique. I think that would be our goal as far as Extension is concerned. We would want to get that information to the farmers. We are deeply concerned with technology transfer.

I think this would be very much a part of our ongoing programs. We would hope that this would be available likewise in whatever we are talking about—disease resistance, or tolerance in plants and animals. We would hope that these kinds of characteristics would be incorporated into the seed and through seed technology so that farmers could buy it. It would be available on a broad scale.

It is true, a matter of concern could be whether or not it would go to one group of farmers, one class of farmers. I would hope that in the tradition that we have followed in this country, that we could maintain a system of distributing information on technology transfer to the farm community.

Senator KASTEN. I think that everyone understands the thrust of my question.

Dr. BENTLEY. Yes, sir.

Senator KASTEN. I just would like to say, as a member of this subcommittee, I would like to pay special attention to the idea that we should be helping make these new technologies available to family farmers who otherwise would not be able to take advantage of them.

Dr. BENTLEY. Yes, sir.

Senator KASTEN. We shouldn't leave the field to very large, corporate-type operators——

Dr. BENTLEY. Yes, sir.

Senator KASTEN [continuing]. Because in the long run, it is important that research and extension programs are viewed as programs that help everyone.

Mr. Chairman, I have a couple of other questions that I would like to submit for the record.

Senator COCHRAN. Thank you for contributing to the hearing.

Dr. BENTLEY. Thank you very much, Senator.

Senator COCHRAN. Senator Andrews.

Senator ANDREWS. Thank you, Mr. Chairman.

Dr. Bentley, Dr. Kinney, and your colleagues, it is good to see you. I have an interest, as you know, in this, not only because I hail from an agricultural State, but in another vein. I am probably the only agronomist in the U.S. Congress. I don't know whether that is good, bad, or indifferent.

Senator KASTEN. It is better than being a lawyer. [Laughter.]

GERMPLASM RESOURCES

Senator ANDREWS. I guess it is better than being a lawyer. Unfortunately, they don't pay agronomists as well as they pay lawyers around this town.

I am intrigued, Dr. Kinney, in what you say about plant science. I understand that you will be assuming responsibility for a germplasm resources grant, funded by the Cooperative State Research Service, and increasing support for new gene exploration.

This goes back to what we had 12 years ago. At that time we had so much commonality in the various varieties of corn that when disease hit, it about wiped us out. We have been constantly wondering if we are going to keep differing germplasm so that we retain different breeding strains that will save us from that kind of a problem in the future.

What is the status of that situation? Are we conducting research on germplasm to your satisfaction, or have we forgotten about it? Are we again exposed to that problem?

Dr. KINNEY. Senator Andrews, it is not absolutely clear to me yet what the specific question is. If you are talking about preservation——

Senator ANDREWS. My question is: What are we doing about germplasm as far as maintaining separate strains, so that we are never again revisited by what happened a decade or more ago when we had so much commonality in a basic feed grain?

Dr. KINNEY. Yes, sir.

Senator ANDREWS. We were just about wiped off the map. Can you tell this committee, "Yes, we do have separate breeding in the major varieties of corn, barley, and oats?" Or are we still drifting along and liable to be placed in a vulnerable situation again?

Dr. KINNEY. I think, Senator Andrews, one of the greatest priority areas in the agricultural research services is germplasm, from both the standpoint of—or rather from three standpoints: Collection, preservation, and the evaluation of that germplasm to find out what genetic potential it has. This third component, the evaluation, is the one that relates to the problem you are concerned about.

Senator ANDREWS. Are you feeding that information into the various States, at the State level as well as Beltsville?

Dr. KINNEY. Yes; we are getting the information to the States.

Senator ANDREWS. Are you observing that the commercial breeders as well as the governmental breeders are paying attention to the importance of having separate germ strains?

Dr. KINNEY. Absolutely. Senator, after spending several years and several million dollars, we have just completed the germplasm resource inventory network, which is a system that allows any plant breeder anywhere in the country to tap into an inventory and determine what is stored in the United States and what the attributes are of that germplasm.

So, if we are talking about a resistance or, as you say, susceptibility to some insect or another problem, that information, insofar as it is available, is in that system.

Senator ANDREWS. Fine. Could you provide, for the record, why you feel assured that we currently have this diversity of this germplasm, in the varieties that farmers are growing—feed grains, wheat, and other cereals, particularly?

Dr. KINNEY. Yes, sir; we would be glad to provide that. I should make one disclaimer. We don't claim to have all the germplasm that is important, because we are still, as you know, collecting germplasm throughout the world.

Senator ANDREWS. That is true.

Dr. KINNEY. We will provide the information on germplasm we have.

Senator ANDREWS. As you know, with the opening up of China in the last 8 or 10 years, we may well be picking up, as you know so well, some different germplasms.

Dr. KINNEY. That is correct.

Senator ANDREWS. The main thing that concerns me as a member of this committee—and I have been a member of this subcommittee for 15 years or so, in the House and over here—is that we do not suddenly wake up and discover that we do not have different varieties out there containing separate germplasms, enabling us to be relatively disease proof, if a new disease surfaces.

I would like to have you give your candid assessment of why you feel assured that this is being monitored and responded to.

Dr. KINNEY. I will be happy to provide that.

[The information follows:]

GERMPLASM DIVERSITY

Although plant breeders have made significant progress in the past decade in broadening the genetic base of cereal and other crops, I do not, yet, feel assured that all of the needed diversity has been identified within our germplasm collections or is being utilized within farmers varieties. We are accelerating our evaluation program and this will result in a dramatic expansion of our database and, eventually, in more useable diversity available to breeders and to farmers.

CEREAL LABORATORY, MADISON, WI

Senator ANDREWS. Mr. Chairman, it is also important to watch specific areas to see how things are functioning in the field. I think it is about time to take another look at something that Senator Kasten is interested in. I am referring to the USDA–ARS cereal crops research unit at Madison, that was created, as you know, by the combination of the Oat Quality Laboratory, and the Barley and Malt Research Laboratory.

The laboratory in Madison has played a significant role in barley research programs. North Dakota is the No. 1 producer of barley, so that is very important to us.

What are your plans for the laboratory? We now understand that other cereal grains besides oats and barley may be researched in this institution. Does this portend a dilution of the research effort on barley and oats?

Dr. KINNEY. No, Senator. I just recently met with the malting and barley people in Minneapolis and recently with the oat people. We have been able to assure them that there will be no diminution of research on either oats or barley at Madison. We have no intention of reducing that program.

Senator ANDREWS. Have you included provisions in your budget to replace existing barley researchers at the cereal crops research unit and at other locations, including our only USDA–ARS barley researcher in the State of North Dakota, who is scheduled to retire later this year?

Dr. KINNEY. Yes; to my knowledge, there has been a commitment. Could I ask Dr. Ed Knipling from our National Programs staff to comment specifically?

Senator ANDREWS. Sure.

Dr. KINNEY. Dr. Knipling.

Dr. KNIPLING. Yes, sir, Senator Andrews. The Madison lab did at one time have the oat-barley lab separate with similar functions. We are committed to maintaining the program. We do intend to maintain the barley lab at Fargo.

REDUCTION OF BARLEY SCIENTISTS

Senator ANDREWS. Can you explain then, the rationale for the drastic reduction in USDA–ARS barley workers in the last 15 years from over 18 standard man-years to less than 12 standard man-years in 1985?

Dr. KINNEY. If I could comment, Senator. We have had reductions in ARS in the last 10 to 12 years from about 10,000 employees to the current 8,000. We have done everything we can to preserve the various areas of research.

During that same period, because we have had other priorities from the executive and the legislative branches, we have had to move into expanded research in new areas, such as human nutrition and so forth.

So it has not been possible to preserve all of the scientific disciplines, but we have moved out of areas like barley breeding, as we had an opportunity for a university or industry to pick up the critical parts of the program.

We have not, to the best of my knowledge, precipitously, or in any way, pulled the rug out from under a breeding program, unless there was an opportunity for others to pick up the responsibility.

In recognizing, always, that we are under this pressure to reduce our numbers——

Senator ANDREWS. That is true. But one of the problems that we have is keeping some crops that we can grow, competitive. We have a northern tier of States in which barley is our feed grain. We cannot grow corn all that well.

We have difficulty finding the new varieties that will be, shall we say, relatively immune to everything from yellow dwarf to the various root diseases.

Could you—and you ought to do this probably for the record—give me where you now have your ARS barley breeders located, and also where the grants for barley breeding research under the other segments of your combined Dr. Bentley-groups effort, are now going? I would also like your candid observation of, "Are we letting this stuff be spread out to the point where it does not reach a critical mass in one place?"

The future bothers me when I look at what is happening at Madison. It also bothers me when I look at what is happening to the possibility that the one individual may be retired from North Dakota. You have given me the assurance that he is going to be replaced.

I am just looking at this situation as a grower of barley. When I talk to a number of farmers across the State, they say, "Yes, we never have new varieties coming on stream that give us the yield, the draught tolerance, and the tolerance to yellow dwarf that we would like to see." Why can't we get the research community together so that we can indeed, and in fact, meet this research challenge?

I remember years ago, we asked for a similar list of research groups. We had barley breeders in Alabama. We had them in Idaho. We had them in Wisconsin. We didn't have any in Minnesota, which by the way is one of the biggest barley growing areas, next to North Dakota. We didn't have any in South Dakota.

ANALYSIS OF BARLEY RESEARCH

Could you also provide an analysis of the acres of barley grown by the five principal States and the percentage of barley research effort being done in the five principal barley producing States? I would also like the same information for the other barley producing States.

I am sure the chairman would be interested in the same type of thing for cotton and rice. I wonder if your research activities are spread out so broadly that we are not really getting the new varieties coming on stream where the bulk of the acreage is?

Dr. KINNEY. Senator Andrews, I would like to work with Dr. Jordan and my other colleagues in CSRS and develop that information on a national basis so we get a good picture of what is happening, not just in ARS but in the university system as well.

Senator ANDREWS. I am concerned with the Federal function, where you are supporting work in the universities, and where you are directly employing an individual and what you are doing in the Madison lab. I have always wanted to find out whether you might not be able to operate a good deal more efficiently and productively by putting two or three of these researchers together instead of hanging them out, a lonesome polecat here, a lonesome polecat there, without having the inner meshing.

I also wonder whether it makes much sense to do a lot of the research in areas where they do not produce much of a given crop. This will give us an opportunity to take a look at the true picture.

Dr. KINNEY. Senator Andrews, I will be delighted. We have been very much concerned over the last 2 or 3 years with exactly the same thing.

Senator ANDREWS. I thought I was coming up an alley that might strike a favorable chord.

Dr. KINNEY. We will be delighted to cooperate with you. I recognized it.

Senator ANDREWS. Thank you very much, Mr. Chairman.

Senator COCHRAN. Thank you, Senator Andrews.

[The information follows:]

BARLEY PRODUCTIVITY

The Barley Research Program in ARS totals $2.3 million. Seventeen percent of these resources are at the Cereal Crops Quality Laboratory at Madison, WI, and 31 percent are at the new Plant Gene Expression Center, at Albany, CA, for genetic engineering research to improve productivity of barley. Other primary ARS barley research efforts are located in North Dakota, Montana, Idaho, Washington, Maryland, Michigan, and Arizona. This includes research in the areas of genetics, pathology, entomology, physiology, weed control, and production systems. The only ARS scientist in barley variety development is at Aberdeen, ID. The bulk of barley research and variety development in the public sector is done by university scientists within the State agricultural experiment stations. The State agricultural experiment stations are investing a total of $5.3 million in barley research, including $653,000 in Cooperative State Research Service appropriated funds. The programs include production, pest control and management, and are conducted in cooperation with ARS. These State barley breeding programs are located in North Dakota, Minnesota, Wisconsin, Montana, Washington, California, South Dakota, Virginia, North Carolina, South Carolina, Georgia, Pennsylvania, and Tennessee. ARS barley scientists are located where they will have the best possible environment to work with other ARS and university scientists in various disciplines to develop new technology needed to enhance productivity of barley and other crops. Through various planning and reporting mechanisms we ensure this research is coordinated nationally.

BARLEY, RICE, AND COTTON RESEARCH

Information regarding the division of ARS and CSRS/SAES research funds among those States leading in the production of barley, rice, and cotton will be provided for the record.

ARS Research in Each of the Top Five Producing States of Barley, Rice, and Cotton

		ARS Research Effort		
State	1984 Acreage (1000) acres	Estimated FY 1985 gross	Funding as percentage of total effort*	Type of Research
		BARLEY		
North Dakota	2,900	$204,400	9	Production
Montana	2,110	145,000	6	Production
Idaho	1,340	145,500	6	Production
Washington	980	48,100	2	Production
Minnesota	950	19,100	1	Production
		RICE		
Arkansas	1,150	$230,900	9	Production
Louisiana	528	732,900	29	Utilization & Production
California	430	194,000	8	Utilization & Production
Texas	408	887,000	35	Production & Quality
Mississippi	190	94,800	4	Production
		COTTON AND COTTONSEED		
Texas	4,819.3	3,848,000	13	Production & Ginning
California	1,400	1,152,000	4	Production
Mississippi	1,040	7,225,000	24	Production & Ginning
Louisiana	645	10,295,000	35	Processing & Quality
Arizona	470.5	2,489,000	8	Production

*Total ARS research on barley, rice, and cotton is $2.3 million, $2.5 million, and $29.5 million respectively.

COOPERATIVE STATE RESEARCH SERVICE

Barley, Rice, Cotton and Cottonseed Research in Principal Producing States National Total, State Agricultural Experiment Stations

($ in thousands)

State	CSRS Appro. FY 1983	National Total SAES FY 1983	
		All Funds	SY's
	BARLEY		
North Dakota	$74	$772	6.4
Montana	94	688	5.2
Idaho	22	97	0.5
Washington	80	810	3.8
Minnesota	67	472	2.4
All Other	316	2,435	20.7
	653	5,274	39.0
	RICE		
Arkansas	$134	$1,490	6.8
Louisiana	69	2,022	15.1
California	28	662	4.0
Texas	72	1,086	7.2
Mississippi	141	665	4.9
All Other	82	950	8.2
	526	6,875	46.2
	COTTON AND COTTONSEED		
Texas	$467	$4,378	33.5
California	150	1,975	13.9
Mississippi	276	2,417	18.4
Louisiana	227	1,630	12.3
Arizona	294	1,993	16.6
All other	1,248	6,086	40.2
	2,662	18,479	134.9

COMPARISON OF U.S. AGRICULTURAL RESEARCH WITH OTHER COUNTRIES

Senator COCHRAN. Senator Sasser.

Senator SASSER. Thank you, Mr. Chairman. I want to say just one word, Mr. Chairman. I am delighted that we have our own in-house agronomist on this committee. Senator Andrews, I think you raised the status and the credibility of this committee by serving as our own committee agronomist. I learned something from listening to your questions this morning.

Let me ask this panel a question generally: How does our agricultural research—that is, the extent of agricultural research in this country—compare with the extent or volume of agricultural research that is done in other countries of the world? It is a very broad question.

Dr. BENTLEY. Senator, I would like to try to respond to that. I would start out by saying that it is generally agreed by those who have looked at agricultural research around the world, that the United States is a definite leader in agricultural research. I am talking now in fiber and forestry research and so on.

This was particularly true in the immediate post-World War II era. We were the dominate leader in terms of agricultural research. There have been increases in agricultural research in many countries over the past 25 years, but it is still considered that we have a good system, partly because it is decentralized, partly because of the close working relationship between the Federal and State sectors and publicly supported research. So I think that that is true now.

This leads me to one of the usual comments that I make at that kind of a question: Change is taking place. There are developments throughout the world in the agricultural food science area, research areas, that should be of concern to us because they deal with the competitive position of this major industry.

In the targeted areas, for example, in biotechnology——

Senator SASSER. Yes.

Dr. BENTLEY. It is generally agreed that in the area of fermentations, there is a great deal of research being done in two countries that are singled out—Japan and the United Kingdom—although there are many others.

In looking at the applications of biotechnology into problems of various kinds of genetics or in immunology, this is developing in many areas. However, we are also a leader in this area. That is why we are deeply concerned that we continue to do the kind of research that will not only maintain the lead in basic and applied research, but in the application and development of these products so that it can be used by farmers and ranchers throughout the country. I think that that is a pretty good assessment. I don't think there is any doubt about the leadership role. One indication is the number of people who are concerned about and visit this country for the purpose of looking at agriculture.

SLACKENING OF AGRICULTURAL RESEARCH

Senator **Sasser**. Have we seen in recent years a slackening or diminishing of our effort in agricultural research?

I ask that question for this reason: I had occasion some years ago to be in the company of the former administrator of the Soil Conservation Service, the national administrator who was in my State for the opening of some of their projects, and we spent the afternoon together looking at some of the work that the Soil Conservation Service had done in my State.

The point was made, either by him or some of his associates, that there was some concern, I think in their mind at least, that we were seeing a diminishing of the resources that were necessary for us to maintain a lead in agricultural research and to do the agricultural research that might be necessary for the year 2000 and beyond. Is that a legitimate concern in your judgment?

Dr. **Bentley**. Let me answer part of the question and turn to Dr. Kinney, because he has responsibility for the soil and water work and the interaction with the Soil Conservation Service particularly.

Although there is work being done in every one of the States, I think there has been an increase in support of research in agriculture. For a person who works in it, there is always a feeling there could be more. And we could use more well. But I think there has been a strong commitment to this.

Secretary Block has indicated that one of his major commitments in his administration is to support research and extension and education activities. I think that we are doing a lot of work. We are increasing support.

I think we have to give careful attention to some of the development in biotechnology as it relates to agriculture. There are some new opportunities here that might be very important to the future. I would hope that we can address them. We are doing that through our Competitive Grants Program.

SOIL AND WATER RESEARCH

I would like to turn to Dr. Kinney to make some comments on the soil and water work, because that is a very important part of the ARS in-house programs.

Dr. **Kinney**. Senator Sasser, first a comment about the soil and water work and then just a general comment about research in general.

The Agricultural Research Service is the principal research organization that supports the Soil Conservation Service's needs for research. That is the research that is necessary for them to develop the methodology for them to work with soil conservation and other aspects of our natural resources.

We don't get any strong feedback from the Soil Conservation Service about extensive new needs. In other words, we are pretty much meeting their requirements. Obviously, there are some things that could be accelerated and those research efforts could be expanded. But we haven't had any serious questions from them about research. Otherwise this committee would have heard from us.

A comment now about research in general. I am very much concerned about the technological race that is taking place internationally. That is the competition between countries to gain an advantage through the use of what we call the new biotechnologies or some other jump ahead of the United States or each other in order to capture markets. We have to face the fact that many countries throughout the world are competing for the same market for agricultural products.

There are countries that have, relatively speaking, much more research in agriculture than the United States. But that varies so greatly from country to country, one can't generalize.

I am talking quite specifically about Israel. Israel is a country about the size of New Jersey. But they have extensive, outstanding research programs at many, many institutions throughout Israel. We do a great deal of cooperative work with them.

I am not concerned at this point about the leadership of the United States. But I am concerned about how we move in the future. I think we not only need to look at the need for additional resources, which is one need, but the other need is the ability and the authority to redirect research. If we come to the point where a problem is less important than another problem, we need to be able to let go of it and move on to something that is of higher priority.

Senator SASSER. Mr. Chairman, I expect that I have taken up more than my share of time here. I have some additional questions which I would like to submit for the record. They are directed primarily to Dr. Jordan. If he would answer those, I would appreciate it.

Senator COCHRAN. Dr. Jordan, we hope you will respond to those questions as soon as possible. They will be submitted for the record and included in the record.

Senator Burdick.

[CLERK'S NOTE.—All questions and answers submitted in writing appear at the conclusion of today's testimony.]

POTATO RESEARCH

Senator BURDICK. Mr. Chairman, I think that the questions that I am going to talk about probably could be directed to Dr. Kinney. If anybody else wants to chime in, that is fine.

Several weeks ago, I met with a group of potato growers from Minnesota and North Dakota. They expressed concern about a couple of issues that I would like you to address, regarding the amount of allocation of research funds for potatoes.

Apparently the Red River Valley potato growers had expected to receive about $360,000 for research at North Dakota State University. However, in the final analysis, they received only $60,000. I would like you to provide me with the list which indicates how much of the ARS budget in fiscal years 1985 and 1986 is intended for potato research and include the subject of the research and where it is being done. Can you do that?

Dr. **Kinney**. You want that for the record, Mr. Senator?

Senator **Burdick**. Yes, and me, too.

Dr. **Kinney**. Oh, yes; we will provide that in detail.

Senator **Burdick**. Are the findings correct that I embraced in the question?

Dr. **Kinney**. I am not sure. I will have to check them. My budget officer says, no, they are not.

Senator **Burdick**. Will you supply the correct figure then?

Dr. **Kinney**. We will need to check it out in more detail, Mr. Senator.

Senator **Burdick**. OK.

Dr. **Kinney**. When a budget officer says they are not correct, they may be off by a dollar.

[The information follows:]

ARS POTATO RESEARCH

The slight reduction in funds is due to projected salary cuts.

Location	Research	Estimated Level of Funding FY 85	Estimated Level of Funding FY 86
Albany CA	Potato processing technology.	$ 94,500	$ 93,100
Davis, CA	Disease and nematode control.	8,000	7,900
Tifton, GA	Disease control. Effect of production practices on yield.	76,000	74,800
Aberdeen, ID	Germplasm enhancement and variety development.	312,400	307,600
Beltsville, MD	Nature of disease resistance. Germplasm introductions. Genetic engineering procedures. Germplasm enhancement. Variety development.	978,800	963,800
Orono, ME	Control of potato diseases. Influence of water stress on potato yields.	248,700	244,900
East Grand Forks, MN	Prediction of potato quality. Potato storage.	413,000	406,700
Ithaca, NY	Biology and control of nematodes. Selection of nematode-tolerant varieties.	272,400	268,200
Wooster, OH	Management of insect pests.	73,300	72,200
Wyndmoor, PA	Processing technology. Host-pathogen interactions.	1,014,800	999,300
Yakima, WA	Ecology and behavior of potato insects.	395,300	389,300
Prosser, WA	Germplasm enhancement. Variety development.	612,600	603,000
Madison, WI	Maintenance and evaluation of potato germplasm. Genetic engineering. Mechanisms of disease resistance.	709,800	698,900
Mayaguez, PR	Potato production in subtropical areas.		30,800
Total		5,209,600	5,160,500

RING ROT IN POTATOES

Senator BURDICK. We won't fight about that. If it is much more, we will. How much ARS funding has been dedicated to ring rot in potatoes? The disease has been around since 1932. To potato growers here, it is still a major problem. What is ARS doing about this disease?

Dr. KINNEY. Senator, I know that we have done considerable work on ring rot, but much of it has been on a one-time basis. I don't think we have an ongoing strong-base program. But we have addressed the problem in a very serious way. Mr. Victor, do you have figures on ring rot?

Mr. VICTOR. I have no figures on that disease.

Senator BURDICK. OK. Well, I just want you gentlemen to know that it is still around.

Dr. KINNEY. Yes, sir; we are very much aware of it. We met with the potato people just recently. We are very much aware of it.

BIRD CONTROL RESEARCH

Senator BURDICK. As you know, there is considerable congressional support to transfer the animal damage control program from the Department of the Interior to the Department of Agriculture.

My interest in this stems from the concern of the development of a direct control program for the blackbirds. In North Dakota, as you know, our sunflower farmers fight an annual battle with blackbirds. I am very interested in having ARS involved in this effort.

Do you know what the status is on the transfer of the animal damage control program from Interior to Agriculture? Are you involved in any of the discussions relating to the transfer?

Dr. KINNEY. No; I am not aware of any involvement at this particular time, Senator Burdick. I expect if that program were to be transferred, the first—the most likely point of entry into the Department would be at the Animal and Plant Health Inspection Service, which is a regulatory agency.

For the record, I will follow up and see what the status is.

[The information follows:]

ANIMAL DAMAGE CONTROL PROGRAM

Discussions have been held and will continue between USDA and the Department of Interior to determine the future of the Animal Damage Control Program. At present, both departments would support legislation to transfer the program from Interior to USDA.

SUNFLOWER RESEARCH

Senator BURDICK. Thank you. The U.S. sunflower production has been confronted with a host of insects and diseases which have reduced yield and increased production costs. With proposed changes in the farm program, alternative crops, such as sunflowers, need to be considered and supported.

I am told what is needed is an accelerated research program which would include at least one plant physiologist. What priority does ARS give to research on sunflowers? What is the feasibility of getting a plant physiologist assigned to this area?

Dr. KINNEY. We can provide information, for the record, Senator Burdick. We have a budget of approximately $1 million on research on sunflowers now. Most of the research is conducted at Fargo, ND, Bushland, TX, and Athens, GA. It is in the area of genetics and physiology.

Senator BURDICK. Well, I am glad you said Fargo first.

Mr. Chairman, I think that is all I have on my mind at this moment. Thank you very much.

Senator COCHRAN. Thank you, Senator Burdick.

[The information follows:]

SUNFLOWER RESEARCH

ARS gives a high priority to sunflower research. Current funding is as follows:

FUNDING OF SUNFLOWER RESEARCH

Location	*Estimated fiscal year 1985*
Fargo, ND	$506,846
Bushland, TX	207,595
Other	355,008
Total	1,069,449

We agree on the priority of a plant physiologist position if resources become available to add to the team of sunflower scientists at Fargo. In view of limited resources, however, this would probably mean redirection of resources currently assigned to other problems. We will continue to examine all such opportunities.

CITRUS CANKER

Senator COCHRAN. Senator Chiles.

Senator CHILES. Thank you, Mr. Chairman. I know that you are all aware of the very serious problem that Florida has faced regarding the outbreak of citrus canker. That disease literally threatens the viability of the citrus industry and is therefore of great concern to us.

I would like to know about the status of the emergency citrus canker research program that was included in the continuing resolution last fall. You will recall that this program was part of the Agricultural Research Service that was funded at $1 million in 1985.

Will this important program be continued in fiscal year 1986?

Dr. KINNEY. Senator Chiles, I know that in 1985 we placed a major portion of those funds at Florida State University. We also put $270,000 at Beltsville for a specialist who was working on——

Senator CHILES. University of Florida, rather than Florida State.

Dr. KINNEY. I am sorry. The University of Florida, $890,000, my budget officer reminds me, went to the University, and $110,000 went to Beltsville. That was the 1985 increase of $1 million. These are continuing.

Senator CHILES. Are these administered in the same way? You don't anticipate any change?

Dr. KINNEY. I don't anticipate any change, unless there is a reason for change.

TROPICAL/SUBTROPICAL RESEARCH

Senator CHILES. All right, sir. In the years since most of the responsibility for tropical/subtropical research has shifted from ARS to CSRS, ARS has maintained approximately $735,000 in funding for that program. Is that $735,000 included in the fiscal year 1986 budget?

Dr. KINNEY. Yes; it is.

Senator CHILES. I see. Now, going to the tropical/subtropical research as it has moved into the Cooperative State Research Service, I wish you would tell me something about the research being done now because of this program.

Dr. JORDAN. The nature of the research?

Senator CHILES. Yes, sir.

Dr. JORDAN. As you know, the program is split into two subgroups, the Caribbean Basin Program and the Pacific Basin Program. The program plans for the two basins are developed by their advisory groups, the CBAG and the PBAG groups.

Senator CHILES. Yes.

Dr. JORDAN. These have focused heavily on specialty crops, insect control problems in particular, but a wide range of problems that would include some level of interest in marketing, but most of it is emphasizing production and research.

In 1985, as you well know, total funding of $3.25 million went into this program area. It involves, in your part of the country, Senator, the University of Florida, the University of Puerto Rico and the College of the Virgin Islands. In the Pacific basin, it involves the University of Hawaii and the University of Guam.

It also has some other projects in other institutions in fiscal year 1985. There is one project at the University of California-Irvine Campus, and one project at Louisiana State University, as well.

Senator CHILES. How would you evaluate the effectiveness of the Section 406 Tropical/Subtropical Research Program?

Dr. JORDAN. It has had a high quality output. The projects have had two-fold benefits. One is to strengthen the focus on unique crops, particularly focusing on the tropical/subtropical areas. It has also provided strengthening money for the University of Puerto Rico, the College of the Virgin Islands and the University of Guam.

Through those two advisory groups, sir, it has become quite a competitive program. In fact, the review of programs for the fiscal year 1985 distribution of funds takes place this month for both of those groups.

Senator CHILES. And you think that it has been effective research?

Dr. JORDAN. It has been effective research.

Senator CHILES. Cost effective?

Dr. JORDAN. It has been cost effective. In fact, it has strengthened the competitive position of the participating institutions, Senator, so that they can stand on their own feet better than they could before. I am talking particularly about Puerto Rico, the Virgin Islands and Guam, with the assistance to the larger institutions, the University of Florida and the University of Hawaii.

Senator CHILES. I think you are aware that the University of Florida has utilized this program to do some good basic research on citrus canker over the years. That is helping us, giving us a lead or start, as we try to deal with the emergency that we find ourselves in in canker.

Well, perhaps you can understand my surprise over the proposed elimination of this program at a time when we desperately need programs like this, as you said earlier, to try to keep a lead in agriculture.

Dr. JORDAN. Yes, sir; this is certainly a concern, not only of yours, but of the U.S. Department of Agriculture. It is a matter of putting emphasis on the major flexible programs which include the formula programs and the Competitive Research Grants Program that bring the maximum impact per dollar. However, it has been a fine program and we are quite proud of the research which has been conducted.

Senator CHILES. Of course, this was set up originally, then moved from ARS to CSRS—it maybe should have stayed at ARS, but the reason there being that the formula programs really did not serve this particular niche of need.

We had all of these diseases and pests that were mostly all coming from the tropics. We did not find research being done on those under existing programs. Those are diseases that don't just affect Florida and Hawaii.

Those diseases, as we know, whether it is corn bore or some of the others, spread over the rest of the country. They just happen to come up our way, usually through the tropics.

Why in the world we would be discontinuing research in a program like this just beats the heck out of me. Canker is just one of the good—not the "good"—it is a terrible example of something that could threaten the entire citrus industry. Again, that is Florida, California, and Texas, and it could wipe us out.

Here is an area of some dollars that helped us get some kind of a lead. To cut that off just doesn't make any sense at all.

Dr. JORDAN. All of what you say is quite correct, Senator. I would just like to share with you the fact that in the Competitive Research Grants Program there is a great deal of flexibility to address research needs. Part of that is a $3 million pest science program, along with the Biotechnology Program, which we hope will be of some help in this arena.

Senator CHILES. Well, should this program be retained in 1986, do you anticipate continuing the utilization of the Carribean and Pacific advisory groups as sources for solicitation, recommendation, and distribution of the 406 funds?

Dr. JORDAN. Yes, sir; should the program be retained in fiscal year 1986 we would expect to do that.

Senator CHILES. Mr. Secretary, 2 years ago, the Agricultural Research Service proposed the elimination of several important research stations in Florida.

AGRICULTURAL RESEARCH STATIONS IN FLORIDA

The committee expressed its concern over this proposal by including bill language directing that current efforts at the agricultural research stations at Belle Glade and Lake Alfred be continued and the participation of the Soil, Water, and Plant Program located at Fort Pierce be maintained.

Is it the intention of the USDA and ARS to maintain these stations in fiscal year 1986 at the past funding and service levels?

Dr. BENTLEY. I would like to turn to Dr. Kinney.

Dr. KINNEY. Senator Chiles, we currently have, at Fort Pierce, a $75,000 program; at Belle Glade, we have $187,000; at Lake Alfred, $129,000; and Canal Point, $842,000. We have no intention of diminishing those programs.

Senator CHILES. Thank you. Mr. Chairman, I have some further questions but I think I can submit them for the record. I thank you very much.

Senator COCHRAN. Thank you, Senator, for being here and contributing to the hearing.

PROFITABLE FARMING

In looking over the statements that have been submitted, I am impressed with the fact that there seems to be a consensus that there should be emphasis on the administration's research program in trying to find ways to lower the cost of production for our Nation's farmers, thereby, enabling them to have a better chance at operating at a profit.

Is my impression correct? Is there an emphasis in the administration's research program toward helping to make farming more profitable by finding more economical ways to produce agricultural products?

Dr. BENTLEY. Senator Cochran, I think this is one of the major thrusts, if you take a philosophical thrust for your research activities, because we feel that the competitiveness of American agriculture is as important to its future as it is to any other industry.

We hope that the research that we are doing will, in fact, lead to cost cutting efficiency, reduction in cost of production, and more efficient use of resources. We realize that is not the only element of farming and the food industry but it is certainly an important one.

When one begins to think in general terms about the industry and our country as a whole, we begin to think about our competitive position in global markets and world markets. My colleagues have referred to that several times in their presentation.

I think it is an important challenge to our country at the moment. I think we have a strong lead position in agriculture. We hope that we are going to sustain that in getting assistance from the administration, from the Congress and we hope that will continue.

Senator COCHRAN. I couldn't help but notice in the testimony of, I think it was Dr. Jordan, that he used examples of Mississippi and North Dakota to show that there was evidence of USDA research paying off in dollars and cents for farmers—the catfish industry in Mississippi and the grain farmers in North Dakota.

We appreciate those references, don't we, Senator Burdick?

Senator Burdick. Yes, we do.

Senator Cochran. I am somewhat disturbed about the substantial reduction in funding for the Extension Service. I know that each one of the aspects of the budget for research has been targeted for some reduction. But the Extension Service seems to have come under the knife pretty severely.

A reduction of about $79 million in budget authority has been imposed on the Extension Service in the administration's budget. I am not sure that is fair. I worry about the practical consequence of such a reduction.

What are the practical consequences? Are we going to just have a lot of people in Washington lose their jobs? Or does this mean that a lot of people out in the States and communities, extending the benefits of research to farm families, will have to be dropped from the rolls? What is the practical result of all this?

Dr. Bentley. Senator Cochran, we are concerned about that same question. The major reduction in the Extension budget deals with the Expanded Food and Nutrition Education Program, and those funds are, with the exception of a minimal amount of administrative support, expended in the States.

Of course, the impact of that reduction will be at the State level throughout the country. The other changes in the special programs area will also be largely impacted in the States. If I am wrong on that, I will be corrected. I would like to turn to Dr. Greenwood for the additional comment.

Dr. Greenwood. In our budget we have retained our formula funds, trying to provide maximum flexibility to our cooperating institutions.

As for the programs that are proposed for termination, some of those will be continued by the States. We would expect the IPM program to be retained at half the level at which it is functioning at the present time.

The Expanded Food and Nutrition Education Program, which Dr. Bentley referenced, is a nationwide food nutrition program for low-income families using professional and paraprofessional Extension staff to deliver the program. There are approximately 600 professional Extension workers involved in that program with 4,500 nutritional educational assistants. It is our estimate that most of the professional staff might be transferred to other programs as attrition occurred. This probably will not occur with the nutrition education assistants.

The largest impact would be on the 250,000 low-income families and half a million youth that wouldn't have access to these services and educational programs. States will have a very difficult task in looking at their respective needs, resources available, and establishing priorities. It will mean a reduction in program efforts.

Senator Cochran. Is there any corresponding increase in funding of other Government programs in other departments that might help take up the slack? Or is there any indication that more funding from State and local sources would be available to take the place of the work previously done through the Nutrition Education Program?

Dr. GREENWOOD. I am not aware of any extensive expansion of funding in other departments that might relieve this situation. I would expect there might be some States that would be able to assume a portion of the costs to continue programs. The extent to which that might occur nationwide, we cannot estimate.

Senator COCHRAN. Well, I think that the combination of research and extension of information into the rural areas of the country is very important. It is largely responsible for the productivity of our Nation's agricultural sector.

While I think there are probably ways to tighten up, be more efficient, and be sure we are not wasting money, and while we need to make sure that research is sharing the burden of reducing spending overall, I really don't think that this budget ought to be gutted. I don't think it ought to be targeted for undue reductions in funding levels.

I was just looking at the impact that the budget might have in my State. In fiscal year 1985, for example, funds for the Agricultural Research Service, Cooperative State Research Service, and the Extension Service totaled over $32 million. But under the budget submitted by the administration and under review, there would be about $2 million cut out of the allocation that has been going to the State of Mississippi.

Nationwide, we are seeing similar kinds of reductions in the allocation of resources. While in 1985, agricultural research and extension work amounted to over $1.1 billion, under this recommendation just under $1 billion would be available for these activities.

So I think we have to look very carefully at the budget request to be sure we are not rubberstamping a request that is going to impose hardship at a time when hardship cannot really be handled very well on the Nation's farms.

We are seeing our farmers under a crisis and burden now. We don't want to exacerbate that by approving a budget request that makes their problems more severe rather than less severe.

So we will be looking at this very carefully. I think every Department has to share in the budget-cutting effort. But I don't think any one agency or activity ought to be singled out to bear an unfair burden of the budget restraint effort.

BENEFITS FROM ARS REORGANIZATION

Well, having gotten that off my chest, I will go on to some questions here. In the Agricultural Research Service, I notice that the reorganization, which some of the other Senators touched on lightly as it affects their States and maybe their special areas of interest or knowledge, is ongoing and saved some $12 million, according to the information you have submitted to the committee.

Could you say that there are any other benefits besides dollar savings that have been achieved as a result of the reorganization and streamlining of the Agricultural Research Service?

Dr. KINNEY. Mr. Chairman, yes, I would say that the benefits are indeed great. Because of the restructuring, we now have a centrally managed organization. The number of areas have been reduced from 25 down to 11. So our research programs throughout the country are managed by 11 managers, all of whom report to the administrator.

There is no shifting of funds or programs, changing of programs anywhere in the United States in ARS without review and concurrence by the national program staff and final approval by my office. Each year—and we went through this in September and October—we review the research programs and the funding for each of those 11 areas.

I participate, along with my associate, my deputy, and other top staff at headquarters, with the field people in reviewing and finally coming to agreement on those programs. Any salary lapse moneys that occur, anywhere in ARS, revert to headquarters and are reallocated to the field on priority programs only. So the area directors are now implementers and, as I have told them repeatedly, their major responsibility is research excellence.

I have a deputy for management who is responsible for the management of things, if you will, making sure that the system is such that we can get our research done, get our procurement, get our hiring, and all the other functions necessary accomplished smoothly.

So I think the benefits are far more than just saving $12 million and 300 slots.

USE OF BIOTECHNOLOGY

Senator COCHRAN. The National Academy of Sciences has suggested that the Agricultural Research Service make better use of biotechnology. Last year there was a request for funding of that program. We ended up allocating $20 million for biotechnology. There is a request in this budget for a like amount for the next fiscal year.

At the time the National Academy said, "To be slow in acknowledging and employing the power of these new research tools would be to delay the progress of U.S. agriculture."

But at the same time, some were saying that we are overselling biotechnology, that it really doesn't offer the potential to feed the world, or such as that.

What is your reaction, now that we have moved a little ways into this program? Is this a wise use of Federal dollars? Are we moving too slowly or too rapidly? What is your evaluation of it?

Dr. KINNEY. Are you speaking to Dr. Bentley?

Senator COCHRAN. Whoever wants to answer it.

Dr. BENTLEY. Thank you. Well, first, just a comment about the report. This is a report that was requested by the Agricultural Research Service and funded from some of our evaluation moneys. I think it is a good report, giving lots of good recommendations.

Moreover, I find that many of the recommendations that are in the report are quite consistent with decisions which have been reached in our planning process in the Joint Council on Food and Agricultural Sciences and to the planning efforts of the Agricultural Research Service.

As to the biotechnology and its application, of course, there is much to be learned yet about the possible application. One hears about some very exciting things. Reference was made earlier to the bovine growth hormone or growth hormones in use in general. That is one area. We are hearing about targeting of resistance in insects and ways of controlling insect problems.

One of the things that excites me as much as anything in biotechnology is that we have such a powerful new tool to work at the cellular and molecular level to try to find answers to old problems that have been around for a long time.

In reference to potato rot or ring rot, all of those kinds of problems have been here. Until we find some new tool, we are going to have difficulty in dealing with them. Part of the ARS's statement was in reference to some possible development in brucellosis, another animal disease that has been of concern to human health as well.

So, yes, I think this is true. We are seeing proposals that are coming forward that have to do with the field of immunology and vaccines, and the potential now for foot and mouth disease vaccine is in the offing. It is actually being field tested. That has been coming about as an application of the technologies which come out of the molecular and cellular biology studies that were started 20 to 25 years ago.

So, yes, I think this is true. We need to stress this. The other thing though, that goes right along with it is that many people feel and think in terms of biotechnology as a science unto itself. Biotechnology refers to the group of developments that provide real new tools to do the same kinds of things that we have been doing for a long time: genetics, plant breedings, animal selection, physiology, biochemistry, nutrition, working with soil organisms, control of pests of all kinds, and so on. For all of these, biotechnology becomes a new tool that has the potential, I think, of helping us a great deal. I am very excited about the possibilities.

Senator COCHRAN. With the emphasis on biotechnology, one might suggest that germplasm base research is a logical corollary. If this is your view, what efforts are being made to accelerate the evaluation of germplasm resources?

MANAGEMENT OF BIOLOGICAL SYSTEMS

Dr. KINNEY. First of all, Mr. Chairman, I think that biotechnology, very simply defined, is the management of biological systems. We have been doing that since we have been doing research in agriculture, in fact, in many areas of biology.

So we have to be careful that we don't somehow convince ourselves that we have discovered a new tool. We have just discovered tools that have been sophisticated to the point where they do some dramatic things that they didn't do before.

It is even more important that we get on with the evaluation of germplasm and determine its worth, because we can now more rapidly manipulate the movement of genetic material from plant to plant or even between species.

So germplasm is our top priority this year, and it will continue to be a very high priority and biotechnology is one of the reasons. We have opportunities now that we did not have just a short time ago.

OVERSEAS RESEARCH

Senator COCHRAN. There was a description in a statement about the work being done in Brazil, about imported fire ant research, and the prospect that that might prove to be helpful in getting rid of that ornery pest that has been plaguing the Southeast and is now moving into other areas, as you know.

I wonder, to what extent is ARS research being done overseas? Is this an isolated instance of overseas research or are there other areas in which we are doing research overseas?

Dr. KINNEY. I think it was Dr. Jordan who referred to the fire ant work in Brazil.

Senator COCHRAN. It was.

Dr. KINNEY. As far as ARS is concerned, we have several laboratories overseas. In fact, we have one in Brazil that is concerned with the African bee and how we might cope with that when it does gain entry into the United States.

Most of our laboratories overseas, or several of our laboratories overseas are concerned with biocontrol. That is finding natural enemies, insects or other organisms that are natural enemies of the pests we have here. In fact our laboratories in France, Italy, Korea, and the one in Argentina are directly related to that concern.

The other laboratories are concerned with animal disease and with the shipment of produce overseas. We have a laboratory in the Netherlands. These laboratories overseas are all small but they are tied in very closely with our research programs here at home.

Senator COCHRAN. Are these good investments or are we better served by research done at home?

Dr. KINNEY. We have no way of doing this research at home, Mr. Chairman, because for example, in the laboratory just outside of Rome, we are looking for natural enemies of insects that exist in this country, but insects that were originally brought from the European Continent without any natural enemies.

As we well know, most of the crops that we produce in this country are not native. Therefore, none of the enemies of the pests are native. So it is part of our Biocontrol Research Program. There is no other place to do it.

Senator COCHRAN. I know that from a visit to the Stoneville area of Mississippi, we were looking at some predator pest experimentation that was going on there. Is there experimentation of that kind being undertaken overseas?

Dr. KINNEY. Absolutely, yes.

Senator COCHRAN. What are the exact varieties of research?

Dr. KINNEY. In fact, when the insects are discovered overseas, in Paris or Rome or Korea, only cursory work is done there to determine that they are a real potential enemy. Then they come back to laboratories like Stoneville and other places where they do the sophisticated determinations.

SPECIAL RESEARCH GRANTS

Senator COCHRAN. In the Cooperative State Research Service, we can't help but notice that the administration is not requesting any funding for special research grants, and there is level funding for formula funds under the Hatch Act programs. So it is obvious that funds are going to be scarce for research that is going to be done out in the States.

Aren't we really proposing, if we approve this budget, to reduce the amount of research done by millions of dollars if special grants are terminated?

Dr. JORDAN. The answer is that the reduction is $28.5 million in the Special Research Grants arena. This amounts, Senator, to approximately 2 percent of the total system funding.

The State Agricultural Experiment Station system has about $1.3 billion in total research from all the various sources that I showed you. So it would account for about a 2-percent reduction overall. As Secretary Bentley has indicated, more can always be well used and we would know where to put it, too.

COMPETITIVE RESEARCH GRANTS

Senator COCHRAN. One thing that concerns me is that experience has shown that in the competitive grants area, the bigger, more sophisticated colleges and universities that are well-funded and well-endowed always win the prizes, and the smaller State colleges and other institutions of higher learning, which could do the research, just don't have the resources to match up with the larger institutions. The rich get richer and the poor stay poorer.

I don't think that is good policy, necessarily. What is your reaction to that?

Dr. JORDAN. We hope that these programs are fitted together, specifically fitting together base funded formula programs, Competitive Research Grants and Special Research Grants, and so on to achieve these ends.

There are some differences among these institutions. There is no denying that. What we hope in each and every case is that CSRS can provide "personalized" assistance in building a competitive staff and faculty at each of these institutions.

Mr. Chairman, we review the programs at more than 100 institutions each year. In those visitations, we take with the CSRS team leader, on the average, about four other major scientific leaders in that particular discipline to assist the institution in building its competitive base. So there will be some differences. There is little doubt about that.

I think there may be some experience that Dr. Kendrick can call on, perhaps about the relative success rate of the large and small institutions.

Dr. KENDRICK. Mr. Chairman, just a comment on that. We keep very good records annually on the institutions—the number of institutions that apply and how many grants are awarded. We address that issue each year when we orient our program managers and our chief scientists.

First of all, you well understand that in the Competitive Research Grants Program, we seek out the best research expertise to conduct this fundamental research. I don't think you can deny that some of these major institutions have probably moved out faster in building some of that competence on their staffs. Up until this last year, with $17 million in the Competitive Research Grants Program, there were a lot of good research proposals that we certainly did not reach. Our hope is that with the expanded funding for Competitive Research Grants, that we will now broaden the base. We know there is a lot of competence out there, and we have been unable to fund some good proposals. I think it will be interesting to examine the record after the next 2 or 3 years and see if we have reached into some of the other institutions. Many of the institutions are beginning to build a research competence that is going to be competitive.

COOPERATIVE FUNDING OF EXTENSION ACTIVITIES

Senator COCHRAN. I know that the total amount allocated for those activities in the Extension Service budget is not the full amount expended in the extension effort. State and local sources fund a large share of those activities. According to information available to me, as much as two-thirds of the extension effort is really paid for by State and local sources. Does that continue to be true?

Dr. GREENWOOD. Currently, the portion of Federal funds provided the Cooperative Extension system is approximately 33 percent. The remaining two-thirds of support for Extension programs comes from State, local, and private sources.

In the past decade, there has been some shift in the mix of funds. County funding has remained relatively stable in terms of the percentage of the total. States have increased support, and the Federal share has decreased from 40 percent to 33 percent.

4-H PROGRAMS

Senator COCHRAN. I understand that there are some new program directions for 4-H being developed or worked on. Could you tell us something about these?

Dr. GREENWOOD. We have a panel on 4-H looking at future program opportunities and policies.

I have with me, sir, the Deputy Administrator for 4-H, who has joined our staff since our hearings before your subcommittee last year. If I may, I would like to call upon Dr. Donald Stormer to respond to your question.

Senator COCHRAN. Welcome, Dr. Stormer.

Dr. STORMER. Thank you, Senator. We do have a panel on the future of 4-H. The panel is made up of State directors of Extension, one for each of the four regions, one 4-H leader from each of the regions, and the Extension Service, USDA. The panel is looking at trendlines for participation in 4-H and the needs of young people in the future.

Senator COCHRAN. I understand that one of the growth areas is urban 4-H; the cities are enjoying a large and rapid growth participation. Is that still the trend, and if so, what is the reason for that, and what are their activities?

Dr. STORMER. First, the overall trendline in 4-H is downward. Participation in 4-H reached its highest level in 1976, with 5 million young people. In fiscal year 1984, participation was 4.4 million, a decline of about 15 percent. That decline generally matches the decline in the numbers of young people in the ages of 9 through 19.

Second, the paid staff serving the 4-H Program has declined 25 percent since 1973. Each person paid to serve the 4-H Program is reaching a much larger number of people. The efficiency and performance of our staff is at an all-time high.

Senator COCHRAN. What about the urban center 4-H clubs? I understand they were growing. Are they not any longer?

Dr. STORMER. The urban 4-H clubs are no longer growing at the present time. Again, I think the staffing situation has precluded the opportunity to expand services for these communities. Our largest participation continues to be farm and rural young people. About one-third of the 4.4 million young people are urban.

Senator COCHRAN. Well, thank you very much. We wish you well as you do your work for 4-H.

Dr. STORMER. Thank you.

URBAN GARDENING

Senator COCHRAN. I notice that urban gardening is one of the programs targeted for elimination. What will be the impact of dropping this program now?

Dr. GREENWOOD. The urban gardening program this year is functioning in 21 cities across the country. The program is designed to aid low-income people in the urban areas to produce and preserve food for themselves and improve their diets accordingly.

The program currently reaches about 150,000 families. We would expect aspects of this to be continued primarily through the use of master volunteers, but from indications that we have from a number of States across the country, they will be unable to maintain the program at its current level.

FINANCIAL MANAGEMENT ASSISTANCE

Senator COCHRAN. I understand, with the difficulty of many families in making their payments to Farmers Home Administration under loan agreements, that there has been an effort to involve the Extension Service in providing assistance to these farm families.

What kind of assistance is being made available to try to help with the problems that some have with Farmers Home Administration loan programs?

Dr. GREENWOOD. We are working with farm families that have loans from Farmers Home as well as other lending institutions. We have a wide array of programs that have been expanded across the country, providing intensive assistance to those families through a one-on-one look at their current situation and what can be done in the future. Group instruction is also provided on management and strengthening management opportunities.

We would project from the 12-State survey which I referenced earlier, that from January 1984 through early summer 1985, Extension will have provided intensive assistance to about 25 percent of the families that are having severe financial difficulty.

The working relationships with the Farmers Home Administration is very good at the present time, and we are working together to provide the necessary assistance to counsel with and help the families that are involved.

SHARING INFORMATION

Senator COCHRAN. One of the current topics of interest here in the Congress is providing assistance to the famine-plagued areas of sub-Saharan Africa. Vice President Bush made a talk yesterday in Geneva about the level of assistance that we are making available.

I noticed that last year in connection with a statement for funding of the National Agricultural Library, there was discussion of a program to provide information from our library here to those nations which are developing their own information systems about agriculture and upgrading the quality of information that is available in those countries being served under AID supported programs.

What has been happening in connection with this program? Is this something that has turned into an exchange of information or technical assistance?

Mr. HOWARD. The National Agricultural Library continues to intensify the sharing of information with the nations of the world, primarily through our giving bibliographical information to the FAO system in Rome called AGRIS. We provide about half of the records that go into the AGRIS system. This information is generally available to any country in the world through that system.

We, in addition, provide document delivery on that directly to any country, on a cost-recovery basis.

USER FEES

Senator COCHRAN. What has been the effect of user fees on requests for services? I know that you substituted a user fee program to try to recoup expenses. What has been the impact of that?

Mr. HOWARD. As far as a lessening of requests coming in, it has not happened. The number of requests that we have been getting for help has not lessened. That is increasing continuously, year-by-year.

CONCLUDING REMARKS

Senator COCHRAN. Dr. Bentley, I appreciate your being here this morning and providing the committee with this information and testimony. The panel has done an excellent job of responding to the questions of the subcommittee members. We appreciate, as always, your responsiveness to the committee and its interests.

Dr. BENTLEY. Senator Cochran.

Senator COCHRAN. Dr. Bentley.

Dr. BENTLEY. I would like to say that we have enjoyed this very much. We like the opportunity to have questions asked of us so that we can respond. Sometimes we need to get additional information but that is the only way we can get the information that you and members of your committee need.

GRADUATE EDUCATION

I would like to say that there is one area about which we didn't make an explicit comment this morning, and I want to be sure that your committee knows that we are much concerned with it. That is the matter of recruiting and getting more students into our colleges of agriculture where we see a decline in enrollment that is very much similar to the experience that was reported on 4–H.

This is an area that we are giving attention to, particularly as we think of the people who go to industry, who are trained in the universities, going to industry and becoming research leaders for the future. Graduate education is tied in very much with our research programs and training of the expertise for the future.

If one could be a bit philosophical, really when we talk about where we will be in the nineties or beyond that, part of it or much of it will be shaped by the people who will be leading our scientific and educational efforts in this country, whether they are in government or universities or industry. So we are much concerned with that.

While it is sometimes difficult to do all that we can, we are certainly giving attention to it. And by not making a specific reference to it today, I don't want to leave the impression that it is an item that is out of mind at all.

SUBMITTED QUESTIONS

Senator COCHRAN. Thank you very much for that statement. We congratulate you on your efforts in that regard. I have some additional questions for each of you which I will submit for the record. The other Senators also have additional questions. We hope you will respond as soon as possible.

[The following questions were not asked at the hearing but were submitted for response for the record:]

AGRICULTURAL RESEARCH SERVICE

QUESTIONS SUBMITTED BY SENATOR COCHRAN

REORGANIZATION

Question: First, let me commend you on the management innovations you have made and that have freed-up $12 million to be used for high-priority research. Obviously, we want as much money as possible to be used directly for research projects. Could you briefly describe the changes that have been made which made this money available and any plans you might have for continuing this effort?

Answer: Today's ARS is a lean organization. One layer of program and administrative management has been abolished -- the Regional Offices. Eleven Area Directors now report directly to the Administrator instead of 25 reporting to four Regional Administrators. Also, many of the business operations of ARS have been centralized at Headquarters. In this entire process more than 300 positions and $12 million has been saved from reduced overhead costs which now represent only 10 percent of base resources compared with 14 percent before the recent ARS organizational realignments took place. ARS has no additional plans for substantive organizational changes but will continue to strive for increased efficiencies and cost savings in Administrative Management and make case by case adjustments as appropriate.

Question: You have mentioned having to move money and people around, which is never popular. What redirections have been made in the last year?

Answer: In FY 1984, ARS redirected about 100 projects totaling approximately $10 million. All of these actions involved reorientation of research in place and did not require transfer of personnel or funds from one research location to another. The reasons for these redirections were varied and generally included one or more of the following: Achievement of project objectives, completion of the original 3 to 5 year life of the project, need to initiate research on higher priority problem, attrition of project personnel, and research approach no longer appeared promising to achieve objective.

Question: Do you currently have any planned?

Answer: ARS is proceeding with similar types of changes and reallocation of resources to high priority problems and research in FY 1985. We have no specific goal or target on the number of projects or funding level to redirect, but are making decisions on a case by case basis in a routine manner, depending on need.

Question: How much movement has been necessary, and what have been some of the major reasons for the moves? What steps are being taken to minimize the trauma for those families affected by these moves?

Answer: In FY 1985, fifteen program change actions have been planned and initiated that involve movement of personnel from one location to another to undertake higher priority research. Actions taken to minimize the hardship of these physical relocations on personnel include allowance of a reasonable length of time, generally about 6 months, to complete ongoing research and make necessary personal arrangements for the move. Also, ARS financially reimburses employees for transfer costs, including real estate sale and purchase fees, movement of household goods, and temporary housing expenses.

Question: Central to your reorganization was focusing management at the headquarters level. Have you experienced any difficulties with this? Are there any benefits to this besides the dollar savings already mentioned?

Answer: No major insurmountable difficulties have been experienced in focusing ARS management to the Headquarters level. Certainly, many employees have had to adjust to new work locations, responsibilities, and reporting and communication channels, but the receptive and supportive behavior of the vast majority of affected personnel has permitted a smoother than expected transition to the new organizational alignment. ARS is now fully staffed and operational in the new organizational structure. In addition to management savings in positions and funds and the initiatives of new research thrusts with these resources, there are indeed other significant benefits to ARS from the reorganization. ARS is now a centrally managed organization with a much improved national focus to its research programs. This centralization permits ARS to be much more responsive and timely in its program and management decisions. Also, ARS is fiscally accountable for the specific programs and problem areas for which the funds are appropriated and allocated.

Question: How will the $12 million savings from the reorganization be distributed -- new projects, increased funds for certain ongoing efforts, or what?

Answer: The $12 million in savings from the ARS reorganization was allocated to high-priority research beginning in FY 1984. This support will recur in FY 1985 and beyond for these research projects. About 65 percent of the funds were used to initiate new research projects and the balance used to accelerate selected ongoing efforts, all at existing ARS research centers. ARS programs receiving these resources are located at Albany, California; Fresno, California; Gainesville, Florida; Peoria, Illinois; W. Lafayette, Indiana; New Orleans, Louisiana; Columbia, Missouri; Ithaca, New York; Raleigh, North Carolina; Logan, Utah; Pullman, Washington; and Beltsville, Maryland.

Question. Could you briefly review the progress of your 6-year implementation plan for us?

Answer: The 6-year implementation plan has been very useful to ARS for guiding program directions and management decisions and for communication with cooperator, support, and user groups. The plan continues to be a valid concept for ARS. Since FY 1982, the year which provided the program base for the 6-year plan, the ARS budget has increased by $61 million. These increases have been selectively placed in high-priority research areas thus greatly minimizing the need for shifting resources away from some program areas. All major program areas targeted for increased emphasis including components of plant and animal productivity research have continued to grow in the past 2 years. ARS is pleased with this progress.

Question: What are the high-priority research areas now?

Answer: Development of improved technology for solution of agricultural problems continues to be a goal of ARS research. Among the highest priorities are improvements in production efficiency so as to lower farmer costs and improvements in product quality and price competitiveness to increase domestic and export market demand. Conservation of natural resources and improved human nutritional quality of agricultural products also continue to be high-priority research areas.

NATIONAL ACADEMY OF SCIENCE PANEL RECOMMENDATIONS

Question: A National Academy of Sciences panel recently recommended that ARS enlarge its small postdoctoral program from 25 to 750 people. That is a rather large increase. Do you have plans to increase your postdoctorate program in the near future?

Answer: The Postdoctoral Research Associate Program is a very important part of ARS' scientific capability. We have long recognized the need for increased opportunities for postdoctoral scientists as a means of bringing in fresh and new skills and technology. During FY 1985, ARS will support about 200 postdoctoral scientists nationwide. During the next few years, we hope to double this number as we move toward the recommended target.

Question: How would such an increase be funded in view of current fiscal constraints?

Answer: Funding support must come from ARS base resources. We are seeking to manage these funds in new ways to increase our flexibility for supporting postdoctoral scientists and other high priority needs. Recent ARS management streamlining activities have increased ARS research programs nationwide by approximately $12 million. Substantial portions of these funds are being used to expand ARS scientific capabilities with new postdoctoral scientists to conduct the research in the assigned program areas.

Question: This same panel also recommended that ARS further consolidate its centers around the country. Are these recommendations in addition to the changes you have already made in the past 2-3 years? Do you intend to make these further changes? If so, when?

Answer: Yes, the National Academy of Sciences panel recommendations relate to their perception of the need to further consolidate some ARS research centers in addition to the changes already made in ARS in the past several years. ARS has no plans to consolidate any research centers in specific response to the panel report. However, ARS recognizes the need to improve the program and management efficiency of some small research centers and to establish stronger critical mass and interdisciplinary teams of scientists to more effectively carry out the research programs and solve problems. As a continuing part of program evaluation activities, ARS will make case by case decisions on research program consolidations as needs require.

PRODUCTIVITY IN AGRICULTURE

Question: Agriculture must become profitable. Production costs need to decrease to not only help farmers increase their profits, but to also make U. S. agriculture commodities competitive in world markets. What progress is being made toward this goal in your opinion?

Answer: Among the highest priorities for ARS research are improved technologies to reduce the costs of farm production and to improve quality and marketability of agricultural products. The high value of the dollar abroad has been a major factor in suppressing export markets and in assuring significant technological developments in farm production efficiency domestically. Nevertheless, overall crop production per acre in the U.S. increased 16 percent from 1977 to 1982 and farm productivity per hour of labor increased 36 percent in the same time period. An example of current ARS research that is contributing to an even more efficient and productive U.S. agriculture is boll weevil eradication in North and South Carolina that reduced cotton production costs by more than $30 per acre in 1984. Other research on conservation tillage systems nationwide has resulted in reduced tillage and energy costs for farmers. Recent biotechnological breakthroughs have provided new tools for more efficient diagnosis and treatment of animal diseases, including trichinosis in swine and coccidiosis in poultry. We feel exciting progress is being made in the goal to increase agricultural productivity but much more work remains to be done.

Question: Are there new varieties and production practices that look promising in this regard?

Answer: Yes, there are. We are concentrating on evaluating plant germplasm from around the world and moving individual genes into commercially acceptable lines. Over the last 4 years, we have introduced 875 new genetic lines of economically important crops and 220 improved varieties. We have stressed increased yield and quality, and genetic resistance to insects, diseases, and environmental stresses such as temperature and moisture extremes, soil infertility, chemical residues in the soil, and air pollution. Production practices such as minimum tillage, supplemental irrigation, drainage, integrated pest management, improved biological control, and improved methods of harvest should all contribute to improved production efficiency. New applications of computer technology in agriculture are being researched and developed to provide farmers modern tools for making the best management decisions possible to optimize their production efficiency and marketing for maximum profitability.

GERMPLASM

Question: What is the status of the new Germplasm Resources Information Network (GRIN)?

Answer: The Germplasm Resources Information Network (GRIN) is the functional and operational database of the National Plant Germplasm System (NPGS). After its first year of operational activity, GRIN now contains passport, evaluation, and inventory information on nearly 300,000 of the 500,000 germplasm collections in the NPGS. Information on new germplasm introductions and new evaluations of older collections are entered directly into the database as soon as the data are assembled. Germplasm curators are using GRIN as an effective tool for managing and distributing the collections.

Question: To whom is it available?

Answer: Some screening of applicants is necessary to avoid overloading the system. Any person with a serious research interest in plant germplasm and its uses can request permission from the GRIN Database Management Unit, ARS, Beltsville, Maryland, to access the system. A logon identifier, password, and instructional materials are provided to each approved user. Training sessions for new users are arranged as necessary.

Question: Is this going to be a major help in research efforts?

Answer: The answer is a very emphatic, "Yes." In the past, germplasm collections have not had nearly the use that they should have had. It has been too difficult to selectively use the collections and as a result, a plant breeder would have to request all or large segments of a given collection and spend a great deal of time and other resources screening for the relatively few accessions that would meet his needs for genetic traits. With GRIN, users can access the collections selectively and request only those relatively few accessions that are known to have traits useful in their research.

Question: Plant breeders and other researchers often complain that much of the germplasm now in storage has not been evaluated (identified and cataloged), and, therefore, cannot be used. It has been argued that biotechnology in agriculture would not be possible without an adequate germplasm base from which to work. With the current emphasis on biotechnology, it seems that enhanced interest and funding for germplasm would be a logical corollary. Is that the Department's view?

Answer: The Department agrees fully with the above statements.

Question: What efforts have been made to accelerate the evaluation of germplasm resources?

Answer: Evaluation is our highest priority activity in the germplasm program. Crop Advisory Committees made up of Federal, State, and Industry scientists and representing 26 crops and crop groups have developed germplasm evaluation plans. These experts have prioritized the needs for evaluation research. To accelerate this work, ARS directed $750,000 in FY 1984 from savings realized through improved management and overhead reduction to these priority needs in evaluation of germplasm. In the FY 1986 budget, the ARS is asking for $1,200,000 for evaluation of germplasm of major crops.

CLONAL GERMPLASM REPOSITORIES

Question: The budget proposes to double funding (from $1 million to $2 million) for operation of clonal germplasm repositories. Where are these located?

Answer: The clonal germplasm repositories are located at Corvallis, Oregon; Davis, California; Geneva, New York; Miami, Florida/Mayaguez, Puerto Rico; Waiakea, Hawaii; Orlando, Florida; Riverside, California; and Brownwood, Texas.

Question: What are their functions as separate facilities?

Answer: The clonal germplasm repositories' functions as separate facilities are as follows:

1. Corvallis, Oregon; filberts, pears, small fruits, hops, and mints.

2. Davis, California; stone fruits (cherries, peaches, apricots, plums), almonds, walnuts, pistachio, grapes, olives, and figs.

3. Geneva, New York; apples and American grapes.

4. Miami, Florida/Mayaguez, Puerto Rico; tree fruits of the subtropics and tropics: papaya, Brazilnut, jujube, avocado, litchi.

5. Waiakea, Hawaii; macadamia nut, pineapple, guava, passion fruit. (Construction being funded in FY 1985.)

6. Orlando, Florida; citrus. (Construction being funded in FY 1985.)

7. Riverside, California; citrus, date, and kiwi fruit. (Construction scheduled in FY 1986.)

8. Brownwood, Texas; pecan and hickory nuts. (Construction scheduled in FY 1986.)

It is necessary to maintain citrus germplasm in both Florida and California because of strict quarantine regulations at National and State levels, and different ecological conditions in the two production areas.

Question: Why are you proposing such an increase?

Answer: The proposed "increase" of $1 million for clonal germplasm repositories is, in fact, not an increase to the Department's FY 1986 budget, but rather a request for reassignment of the $1 million for clonal germplasm repositories in the FY 1985 budget of the Cooperative State Research Service (CSRS) to the Agricultural Research Service in FY 1986. The National Clonal Germplasm Repository system described above will continue to require an annual operations budget of $2 million for FY 1986 and beyond.

Question: The budget also proposes to increase germplasm evaluation and enhancement for major crops by 46 percent (from $2.6 million to $3.8 million). Where will these funds be spent?

Answer: The additional $1.2 million will be spent at:

Stoneville, Mississippi (soybeans)	$200,000
College Station, Texas (sorghum)	150,000
St. Paul, Minnesota (alfalfa)	150,000
Ames, Iowa (sunflower)	150,000
Pullman, Washington (peas and lentils)	150,000
Orlando, Florida (citrus)	200,000
Beltsville, Maryland (wheat, ecogeographic studies)	200,000

OVERSEAS RESEARCH

Question: If I recall correctly, you are working with Brazil on imported fire ant research. To what extent is ARS research being done overseas?

Answer: The ARS overseas research programs are consistent with our higher priority long-range plans and of mutual benefit to the United States and the host foreign government. In addition to the important work on the imported fire ant, ARS is conducting research overseas on the biocontrol of weeds and insect pests, more efficient marketing of U.S. agricultural products, animal diseases, a narcotics substitution project, germplasm exchanges, and plant and animal production.

In FY 1985, ARS has 10 scientists stationed in 8 overseas ARS locations. ARS also has 8 scientists assigned on a temporary basis to international organizations such as the International Atomic Energy Agency and the Inter-American Institute for Cooperation of Agriculture. In addition, about 600 U.S.-based ARS scientists are expected to make foreign trips or other research contacts overseas in connection with their domestic research programs. ARS scientists also act as principal investigators or cooperators in 117 U.S.-Israel Binational Agricultural Research and Development (BARD) and 180 Special Foreign Currency Research Program (PL-480) projects.

Question: What are the cost differences between U.S. and overseas research?

Answer: Although we have not conducted a formalized study of such costs, our observations suggest that at present it is about

20% less expensive to conduct research overseas because of slightly lower cost of living and the advantageous dollar exchange. Not only is the overseas research cost effective, but the types of research being conducted can only be done in the overseas environment.

Question: When research is done overseas, how is this coordinated and monitored? Are ARS specialists stationed overseas to collaborate on projects?

Answer: The National Program Staff of ARS in Beltsville, Maryland, coordinates the overseas research and insures that the research programs are in support of domestic programs.

The ARS specialists stationed overseas provide the NPS coordinators with quarterly research reports and visit with the staff at least once annually to review their research and consult and exchange views with cooperators. Each project overseas is an outgrowth of a project in the U.S. and each overseas project has a domestic cooperator as partner.

Question: What restrictions are there regarding how much and what types of research can be done overseas?

Answer: Virtually there are no restrictions; however, we are very selective as to the projects that we support overseas.

Research is conducted overseas because it can better be done there than in the U.S. and is necessary to support high priority domestic research programs. The work on exotic animal diseases, for example, can best be done in countries where the disease is prevalent. The search for natural enemies of insect and weed pests are conducted in foreign countries where the pests originated, as another example. Programs selected for overseas research are limited to our highest priority needs, as identified in our planning process. Resources are allocated by the National Program Staff as necessary to the overseas programs to carry out the research.

Question: To what extent are research results from other nations adaptable to U.S. needs?

Answer: All of our research conducted in foreign countries is directly related to high priority research being conducted in the United States. Hence, the research data obtained overseas is generally adaptable to U.S. needs at the scientific level and often at the user level. Typical examples of overseas programs directly related to domestic needs include plant and animal disease, germplasm collection, and biocontrol of plant and animal pests.

BIOTECHNOLOGY

Question: The National Academy of Sciences has suggested that ARS overhaul its operations to make better use of biotechnology. "To be slow in acknowledging and employing the power of these new research tools would be to delay the progress of U.S. agriculture," says a recent report. At the same time, one of your ARS scientists in Colorado is proclaiming that the potential for biotechnology to feed the world has been oversold to the public. What is your reaction? Are we moving too slowly? Too rapidly? What is your opinion?

Answer: The ARS is moving with all deliberate speed to bring the most recent scientific advances, particularly those in the biosciences, to bear on agricultural problems. Acutely aware of its role as a mission agency and the need to provide the best mix of short- and long-term approaches to problem solving, ARS currently is utilizing the new approaches in only about 5 percent of the total research program. The ARS pursues biotechnology opportunities when there is a clear vision that these new tools offer a solution to a problem as opposed to pursuit of biotechnology for the sake of pure science.

Dr. Van Schilfgaarde, ARS Area Director for the Mountain States Area, is the Colorado scientist to which you refer regarding the overselling of biotechnology to the public. The potential for biotechnology to solve all the problems of world hunger in the short term has perhaps been oversold by some to the general public. Biotechnology is nothing more than a set of techniques or scientific tools that will help us to answer researchable questions more quickly than was possible a decade ago.

Current levels of biotechnology research in ARS have about doubled since 1982. The ARS expects to continue to emphasize these new research approaches as opportunities permit and needs require, but only at a rate commensurate with biotechnological advances which are relevant to application to agricultural programs.

The ARS believes it is moving in the proper direction relative to biotechnological approaches to problem solving and is doing so at a rate appropriate to its mission, capability, flexibility to implement change, and advances in biotechology. Although biotechnology will never substitute for or replace many traditional research approaches, it holds the promise to speed up the overall research process and provide new tools for the solution of problems not now possible. Advances in biotechnology have truly been profound in the last several years and new discoveries are being announced daily. The ARS does not believe the potential for biotechnology is being oversold.

Question: Biotechnology is a hot issue right now, and a lot of people are jumping on the bandwagon. What types of coordinating mechanisms are in place to facilitate exchanges of information and to ensure that efforts are not being duplicated?

Answer: Within ARS, centralized program leadership and resource allocation responsibilities now vested with the National Program Staff permit a much improved national program focus and coordination, thus ensuring a balanced use and non-duplication of biotechnology research approaches. This coordination is facilitated by the ARS Program Plan which guides program and management decisions. For exchange of technical information on research plans and progress, ARS scientists are increasingly using computerized electronic mail networks in addition to continuing to use traditional communication forums such as scientific literature and participation in research planning conferences and other scientific meetings.

Question: How much emphasis is being given to biotechnology in the private sector?

Answer: The ARS does not have precise information on this matter, but we know that there are over 200 large and small biotechnology companies now in existence, mostly involved with medical, pharmaceutical, and industrial applications. The total investment is estimated to have been about $1 billion in 1984.

Question: Are attempts being made to integrate private and public sector efforts in biotechnology?

Answer: Yes, there are active programs to integrate private and public sector efforts in biotechnology at all levels. These range from Department of Commerce sponsored proposed legislation to clear the way for formation of public/private sector limited partnerships to perform research to scientist exchange programs at the bench level.

Generally, ARS pursues integration through exclusive licensing of public patents assigned by ARS scientists to companies which will pursue commercial development of ARS research findings when appropriate. The ARS has also established a national-level technology transfer function to inform a broad spectrum of potential commercial developers of ARS research that appears opportune for industrial involvement. Interest usually is followed by a period of joint effort. In biotechnology, ARS has established a Plant Gene Expression Center at Albany, California. This is a research consortium developed as a joint venture between ARS and the University of California at Berkeley. The consortium is structured to accommodate industry scientists and cooperative research projects as part of the consortium program.

Throughout all of its research programs, ARS encourages and practices open information exchange through formal and informal communications with its research users on research in progress through meetings, workshops, and symposia.

EDB ALTERNATIVES

Question: In your prepared statement, you indicate that hot and cold dips as an alternative to EDB have allowed continued marketing and exporting of citrus, papaya, and other fruits. Has there been any decline in such exports, or has the hot and cold dip alternative adequately served all needs?

Answer: There has not yet been a decline in export of grapefruit because use of EDB continues to be allowed by Japan. However, to be prepared for an alternative when needed, the cold treatment was developed for grapefruit shipment to Japan. Limited commercial shipments of cold treated grapefruit were made over 2 years with excellent results. However, under full scale commercial use, the ships used were not able to maintain the cold temperature requirements as well as the high humidity needed to insure fruit quality. Where alternative treatments were required for interstate commerce in the U.S. where EDB is banned, an alternative fumigant, methyl bromide, is used.

The treatment for papaya is a combination of selecting fruits less than one fourth ripe and two hot water dips. Export out of Hawaii declined when a portion of the fruits treated with the above schedule resulted in uneven ripening (hard spots). A reduced heat treatment schedule combined with rapid cooling of fruit should solve the hard spot problem.

Question: What are the advantages and disadvantages of hot and cold dips versus EDB?

Answer: The primary advantage of hot and cold temperature treatments is the non-chemical nature, therefore, there are no human safety questions.

The disadvantages include high costs, high energy, and a long treatment time. For example, the treatment time required to kill insects with cold treatment is weeks as compared to 2 hours for EDB. In addition, many commodities are damaged when exposed to the hot or cold temperatures required to kill insects.

Question: Is there a need to continue to search for other alternatives to EDB, or is the hot and cold dip solving the problem?

Answer: We are evaluating other alternatives to EDB. The hot and cold dip treatments are not suitable as a permanent, long-term solution for the industry.

Question: Are there other alternatives that look promising today?

Answer: Future quarantine schedules will depend on multi-treatment methods any of which singly do not provide quarantine security but in combination will do so. Other schedules may include biological and cultural factors that reduce or eliminate insect survival naturally, such as harvesting fruits before they are susceptible to infestation or when only insect eggs and newly hatched larva are encountered as surface contaminants. Such surface infestations are very susceptible to heat or cold treatment. Other promising alternatives include keeping fruits free of pest insects through barriers or in-field control, mechanical removal of infested fruits, radiation, modified atmospheres, or a combination of the above.

RESEARCH OVERHAUL PROPOSAL

Question: A special committee of the National Research Council of the National Academy of Sciences has produced a report suggesting several items for ARS:

a. Make better use of biotechnology as a research tool to improve crop yields, fight insect pests, and save consumers money on meat;

b. Reduce the number of research centers;

c. Set up an advisory council of leading scientists; and

d. Make budgets more flexible for designating 10 percent as discretionary.

Would you comment on this?

Answer: The ARS is very pleased with the National Academy of Sciences report and agrees that use of the new biotechnology tools in agricultural research hold great promise to accelerate the solution of some difficult agricultural problems. The ARS is already directing about 5 percent of its current resource base to biotechnology research approaches. This research is conducted at more than 40 ARS locations and covers a broad scope of problems related to improving crop and animal productivity and the quality of agricultural products for domestic consumers and export markets.

ARS recognizes the need to consolidate some of its research centers. Currently, ARS conducts research at 130 U.S. locations. Many of these have small research programs with less than five scientists each. Because of continued constraints on resources for the Agency as a whole, ARS must strive for increased operational efficiencies where possible. Maintenance of facilities, equipment, scientific instrumentation, and support personnel are more cost effective at some of the larger centers compared with the very small locations. Also, many of the current research approaches to difficult agricultural problems require interdisciplinary teams of scientists not always available at small research centers.

ARS has no plans to establish a formal advisory council of outside scientists to guide ARS research. However, ARS recognizes the value of leading scientists' inputs, including those of many ARS scientists, to the research priority-setting process. The ARS National Program Staff actively solicits and utilizes these scientist views along with inputs and guidance from the Administration, Congress, action agencies, industry, other user groups, and cooperators as a basis for making decisions on program direction and resource allocation.

ARS does not plan to designate 10 percent of its budget as discretionary for scientists to pursue research of their choice. The ARS subscribes to high standards of program and fiscal accountability for its publicly appropriated funds. Based upon a systematic priority-setting process, ARS allocates all research funds to specific program and problem areas. Scientists and line managers at field research centers do not have unilateral authorities to shift these funds to new areas of research, but they have wide latitude in the selection of the research and experimental approaches to the solution of assigned problem areas. Scientists make input to the formal ARS priority-setting process and, in this way, they can strongly influence the direction of research programs and resource allocations.

Question: How does your reorganization effort already underway relate to these suggestions?

Answer: The ARS organizational realignments in the past 2 years have been accompanied by significant changes in the placement of responsibilities for program direction and resource allocation decisions. The National Program Staff is now clearly responsible for these functions. This centralized staff receives inputs direct from leading scientists as well as from a wide spectrum of other sources. This process permits rapid response to high priority research needs and approaches. Reduction in management overhead in ARS also resulted in a direct savings of $12 million, which was used to accelerate high priority research programs, including biotechnology.

LANDS AND STRUCTURES

Question: The explanatory notes show that spending for "Lands and Structures" will increase from $25 million this year to $74 million in fiscal year 1986. You are also requesting bill language which would exempt a National Clonal Germplasm Repository for citrus from the limitations on construction contained in the bill. Are these two requests related?

Answer: Existing language limits the cost for establishing facilities, including repositories. Since ARS has funds available to establish the National Clonal Germplasm Repository for citrus at Riverside, California, a request was included in the ARS appropriation language for Fiscal Year 1986 for an exception to these limitations since the cost of this facility will exceed the current cost limitation. Funds for this facility are included under "Lands and Structures".

Question: What are "Lands and Structures" funds normally used for?

Answer: Obligations included in Object Classification "Lands and Structures" represent appropriated funds for specific non-recurring construction projects. In addition, funds are included for obligations on projects under the language limitations provided in the ARS appropriation. Obligations are included for small buildings not to exceed $125,000; headhouses connecting greenhouses limited to $500,000; cost of alterations not to exceed 10 percentum of current replacement value of a building; and ten buildings at a cost not to exceed $250,000 each. Normal costs are for nonstructural improvements and fixed equipment, structural changes and improvements, lease of land, easements, and lease purchase contracts for construction of buildings.

Question: What will be done with an increased $49 million?

Answer: These funds were appropriated in FY 1985 and prior years for specifically authorized construction projects.

Obligations will be incurred as construction contracts are awarded and progress is made toward the completion of each construction project.

PROPOSED RESCISSION

Question: The Administration is proposing rescission of many facilities. The justification is supposedly that ARS facilities are already operating below capacity. Why do you now want to establish a new facility for clonal germplasm; and why is it not being requested under the Buildings and Facilities account?

Answer: In FY 1978, the Agricultural Research Service (ARS) received $1,000,000 under the annual appropriation for establishment of seven clonal repositories. As one repository was completed, the funds would be available the next year for the establishment of another repository. These funds were used to construct National Clonal Germplsm Repositories at Corvallis, Oregon; Davis, California; and Geneva, New York. The National Clonal Germplasm Repository for Citrus to be constructed in FY 1986 at Riverside, California, will provide ideal ecological conditions for safe maintenance of these irreplaceable germplasm stocks. These conditions cannot be met at any existing ARS locations.

The request for exception to the existing building limitations is necessary since the construction cost will exceed our current building cost limitations under the annual ARS appropriation. Since the funds were made available under the annual appropriation, it would be inappropriate to request additional funding under the Building and Facilities appropriation.

Question: How much will the germplasm facility cost to build? To maintain?

Answer: Construction costs of the National Clonal Germplasm Repository for Citrus will be $500,000.

Maintenance and operating the facility is estimated to cost $200,000 annually.

PURCHASE OF LAND

Question: Why are you requesting the authority to purchase an option on land in Florence, South Carolina?

Answer: We have apparently not made our intentions perfectly clear with respect to this matter. What we are actually seeking in regard to the 58.2 acres of land, located in Florence, South Carolina, and currently held by Clemson University, is not the authority to obtain an "option" for possible future purchase of this property, but for the authority for ARS to purchase the "fee title" interest in this land as expeditiously as possible.

The acquisition of this land is critical to allow ARS to continue solving problems associated with soil and water management in the Southeastern Costal Plains. As has been noted, this land is currently owned by Clemson University but has become excess to their needs since the University has procured new property and has built a new experiment station approximately 10 miles from the subject land. A major portion of the subject land is currently utilized by Coastal Plains Soil and Water Conservation Research Center which is located contiguous to the subject property.

The eventual procurement of this property will allow ARS to: (1) build a weighing lysimeter facility with rainout shelters to provide crop water requirement data for the Southeastern Region (such analytical data are not available in the Southeast, but are critically needed in order to develop irrigation systems and scheduling methods in an economical fashion); (2) develop a lateral move irrigation system which will provide controlled conditions that will allow direct comparison of irrigated and nonirrigated treatments; (3) establish a water table control research facility; and (4) establish long-term research on tillage and multiple cropping systems.

The close proximity of this property to the Coastal Plains Soil and Water Conservation Research Center will allow direct correlation of research results with the data obtained from the computerized weather station. It will also allow real time measurements of physical factors such as temperature and soil water status as well as physiological parameters such as plant water status and nitrogen fixation rates. It is for these reasons we need to acquire this property.

Question: Do you have plans to construct a facility on this land? Is so, why is this request not in the Buildings and Facilities account?

Answer: If successful in acquiring this property, it is not our intention to build facilities on this land. The primary purpose of this land will be development of research plots. The only construction that will take place on this land will be to install scientific irrigation equipment.

Question: Have options, which were authorized in this appropriation bill last year, been exercised on land in Houma, Louisiana, or Fresno, California? If so, for what reason, and what progress has been made?

Answer: The options to purchase land at Houma, Louisiana, and Fresno, California, have not as yet been exercised. The following is the current status of both these actions.

Houma, Louisiana: "Letters of Solicitation" were sent to several Louisiana appraisal firms to obtain price quotations necessary for the procurement of the required appraisal report covering this property. On February 26, 1985, the award for preparation of the required appraisal report was issued. The estimated completion date for this appraisal is April 12, 1985.

Fresno, California: "Letters of Solicitation" were sent to several California appraisal firms to obtain price quotations necessary for the procurement of the required appraisal report covering this property. The award for preparation of the required appraisal report is expected to be issued during the week of March 18, 1985. The estimated completion date for the survey report is April 12, 1985.

Upon completion and analysis of the two subject appraisal reports, a decision will be made regarding the exercise of the option to purhase these lands.

Question: What kind of specialized research labs are constructed each year under the authorization for small construction included in this bill?

Answer: Agricultural Research Services' small construction needs vary each year as the national research priorities are determined. The particular need for an additional small construction project is determined by the type of research to be performed. In FY 1985, the following small construction projects which constitute a cross section of what is normally included under the small construction authorization, were undertaken: A Food Irradiation Laboratory at the Eastern Regional Research Center, Wyndmoor, Pennsylvania; a Swine Farrowing Facility at Beltsville, Maryland; a Metal Storage Building at the Southern Regional Research Center, New Orleans, Louisiana; a Laboratory/Office Building at Stillwater, Oklahoma; and a Headhouse/Greenhouse Building at Mississippi State, Mississippi.

Question: Why do budget constraints not cause you to request a freeze on this construction?

Answer: Budget constraints do cause concern. Each proposed construction project is reviewed to determine whether it is essential for the conduct of research. A determination is made as to the applicability of the construction on a prioritized basis with other research program needs.

SOIL CONSERVATION RESEARCH

Question: Why are you increasing by 20 percent (from $2.5 million) the funding for improved technologies for Soil Conservation Service resource inventories, when those inventories are proposed for termination in fiscal year 1987?

Answer. It is our judgment that the technologies being developed for resource assessment will be needed not only by the Soil Conservation Service but by a number of other USDA agencies including the Foreign Agricultural Service, Statistical Reporting Service, and Agricultural Stabilization and Conservation Service. With reduced budgets, those agencies will need more efficient technologies to make the needed assessments with fewer people.

CARIBBEAN INITIATIVE

Question: You are proposing to spend $154,000 in Puerto Rico through the Caribbean Basin Initiative for research on improving agricultural production. The Food and Nutrition Service (FNS) of the Department of Agriculture (USDA) administers a program of nutrition assistance for Puerto Rico which includes funds for improving agricultural production. Is it possible that this research could be accomplished through that funding?

Answer: The Nutrition Assistance Program for Puerto Rico is a block grant to the Commonwealth. A small portion of the block grant may be used for special agricultural products that will directly improve the nutritional status of the needy in Puerto Rico. Allocations of the block grant for special agricultural projects must be proposed by Puerto Rico, and approved by USDA. Therefore, it is beyond USDA's authority to direct Puerto Rico to support any particular project with block grant funds.

The intended use by Agricultural Research Service (ARS) of the proposed $154,000 increase in FY 86 through the Caribbean Basin Initiative was to assist in the training and development of junior professional research personnel among natives of all Caribbean countries, not just Puerto Rico. These personnel would receive on-the-job training at the USDA-ARS Tropical Agricultural Research Station at Mayaguez, Puerto Rico. In the short term, they would help accelerate existing USDA research programs directed toward development of improved crop production practices in the Caribbean tropics; while in the long term those same personnnel would increase the techhnical capabilities of native citizens to utilize and further improve such technologies for local agricultural production and stimulation of the Caribbean economy.

Consequently, the use of block grant funds for this proposal is inappropriate for two reasons. First, USDA does not have the authority to require Puerto Rico to allocate funds to this project. Second, the project does not directly improve nutritional status of needy persons in Puerto Rico.

PESTICIDE CLEARANCE

Question: Because of the imported fire ant quarantine regulations in the South, some nurserymen can't ship their plants outside the infested area. In the Japanese beetle and European chafer infested areas of the Northeast, nurserymen have several million dollars of orders from Canadian nurseries which may have to go unfilled because nurserymen don't have an approved pesticide to meet the Canadian quarantine requirements.

In 1978 at the time of the negotiated settlement cancelling the agricultural uses of chlordane, it is our understanding that USDA/ARS promised to initiate research to find a replacement for chlordane for nursery use to meet the quarantine requirements. What is the current status of that research?

Answer: ARS initiated research to develop materials for use by nurserymen to meet quarantine requirements. During the past year, information has been developed and packaged into data sets to support registration of the insecticide, isofenphos, for control of Japanese beetles and other white grubs in potted nursery stock and for use in potting soil. These data sets have been forwarded to the commercial supplier with the expectation that the data will be used to petition EPA for registration. Research is continuing to develop methods to meet quarantine requirements for field grown nursery stock to be shipped with balled roots. Three different compounds under test appear to be effective. Additional data to support registration will be collected in 1985 with the expectation that a data set to support registration can be supplied to the commercial suppliers in 1986.

NATIONAL ARBORETUM

Question: What plans does the Agricultural Research Service have to operate the National Arboretum in this age of fixed budget?

Answer: As with our other ARS locations, we have allocated a fixed amount of permanent funds for operation of the Arboretum. Occasionally, additional temporary funds have to be added at a location for specific needs but we will expect the Director of the Arboretum to manage the programs with existing funds.

Question: What appropriation would be necessary to operate the Arboretum properly?

Answer: We believe the planned allocation of $3,041,200 in FY 86 will be adequate to properly operate the Arboretum.

Question: Does ARS plan to transfer the research program to the Beltsville Agricultural Research Center?

Answer: We have no plans to transfer the research program to the Beltsville Agricultural Research Center.

Question: Does ARS anticipate shifting funds from other activities to bail out the deficit funding?

Answer: While we have used some discretionary funds in the current fiscal year to temporarily assist funding of operations at the Arboretum, we do not plan to shift additional funds from other activities.

Question: Does ARS plan to have a separate budget line in its programs just for the Arboretum?

Answer: There are no plans to have a separate budget line for the Arboretum.

Question: I understand that a new Director of Research has been transferred to the National Arboretum. What are the plans for funding, staffing, and developing the facilities for research about new woody plants for America's landscapes?

Answer: This last year, ARS transferred a scientist with salary funds to serve as Research Leader at the Arboretum. While the present staff and facilities are reasonably adequate for the planned research program, we plan to improve existing facilities. We plan to convert an existing seed storage room into a genetics-physiology laboratory, upgrade a tissue culture room, renovate space in the greenhouse-headhouse for support scientists, enlarge and improve the soil preparation and potting area at the greenhouses, repair and upgrade existing glass greenhouses, and add several plastic greenhouses for increased research on woody plants. There will continue to be minor program adjustments to improve the Arboretum research program and facilities with existing funds.

Question: What has been done to begin to implement the October 1984 Master Plan for the National Arboretum?

Answer: ARS will use the plan as a guide for future development of the grounds and programs at the Arboretum. We expect to implement the plan over several years as resources and other opportunities permit. The current research and educational programs and the programs planned in FY 86 are consistent with the 1984 Master Plan. We have already started land clearing operations along New York Avenue and the Anacostia River as called for in the plan.

Question: I understand that the Arboretum is an excellent example of public/private sector cooperation. How are Friends of the National Arboretum (FONA) contributing to the development of gardens and explorations?

Answer: Friends of the National Arboretum have made important contributions to the Arboretum. They have collected funds for direct support of ongoing programs and development of new educational programs and gardens which otherwise would not have been possible. They have paid for plant explorations to foreign countries, hired full-time employees to assist with educational programs at the Arboretum, provided many hours of voluntary work, funded special projects such as locating the National Capitol Columns on the Arboretum grounds, and otherwise promoted improvements of the research and educational programs. We are extremely pleased with this interest and level of support and cooperation from FONA.

EXPORT RESEARCH

Question: How much of your research budget deals with problems associated with exports of U.S. agricultural products? Please provide explanation.

Answer: About $7.2 million of our current funding is expended on problems associated with export of U.S. agricultural products. Of this amount, about $3.4 million is devoted to maintenance of quality and improvement in the quality of export commodities and products. An equal amount is directed to insect control and fumigation procedures, with an additional $0.4 million concerned with grading of exports.

Question: How much of your budget has been used for research needs in the Far East? Has it proved cost effective by sending specialists to the Far East on a case-by-case basis rather than establishing a Far East Technology facility?

Answer: Because the problems associated with U.S. exports are generally commodity or product specific rather than market specific, essentially all of the $7.2 million expended on export research is considered pertinent to the research needs of the Far East. Export problems are currently identified through a formal joint planning and communication mechanism with the action and regulatory agencies. Our experience thus far supports our expectation that a case-by-case approach presently is the most cost-effective means to resolving technical export problems in the Far East.

TUSKEGEE INSTITUTE CENTER FOR FOOD ANIMAL PRODUCTION

Question: Are the goals for the proposed Tuskegee Institute Center for Food Animal Production consistent with the legislative intent of Title XIV, Section 1415 of P.L. 95-113, the Food and Agriculture Act of 1977?

Answer: Yes, the goals are consistent.

Question: Do the specific objectives for the Center address the needs of the limited resource farmer of Alabama and the Southeast?

Answer: Yes, the specific objectives for the Center do address the needs of the limited resource farmer of Alabama and the Southeast.

Question: What is the budget for the Center for Food Animal Production to carry out the activities that Tuskegee Institute proposes?

Answer: The Tuskegee School of Veterinary Medicine is requesting $6 million.

Question: Is there a relationship between the proposed program and the historical work Tuskegee Institute has carried out with limited resource farmers?

Answer: Yes, there is a relationship.

Question: May the technology developed for limited resource farmers be extrapolated for use in Third World countries which have agricultural problems?

Answer: Research and service generated by this Institute could be extrapolated to the needs of farmers in Third World developing countries.

Question: Describe the current research facilities at the Tuskegee School of Veterinary Medicine and tell me whether the lack of new facility is a major impediment to expanding the research and graduate program there.

Answer: The facilities and equipment for conducting research are minimal. Few laboratories are available in the main buildings of the School. An old airport hangar building (Moton Field) has been renovated to contain some laboratories. These are not appropriate to support an expanded research program.

Question: Did the USDA FDA task force recommend that the project was feasible, was needed, and would service the region?

Answer: Yes, the task force recommended that the project was feasible, needed, and would service the region. However, in my opinion and that of my staff, there is no need for regional research facilities. These research needs can be met by existing ARS and state facilities at this time.

PRIORITY RESEARCH NEEDS

Question: What are the priority research needs now? Research on plant productivity appears to be of major interest -- germplasm evaluation and enhancement, for example, and development of gene transfer systems for crop improvement. Couldn't efforts such as this to increase production be viewed as compounding our overproduction problems?

Answer: If one reviews the past and is cognizant of future projections with respect to world agriculture, activities in germplasm evaluation and enhancement, and development of gene transfer systems for crop improvement would not only appear important, they would become essential. We are entering an era of one-world-agriculture. If the United States is to maintain agriculture as a vital and viable component of its economy, then we must be able to compete in world markets on price and quality. This can only be done through continued advancement and rapid adoption of technologies which include germplasm evaluation and enhancement and development of gene transfer systems for crop improvement.

QUESTIONS SUBMITTED BY SENATOR ANDREWS

CEREAL CROPS RESEARCH UNIT, MADISON, WISCONSIN

Question: The USDA-ARS Cereal Crops Research Unit in Madison, WI, was created by combining the Oat Quality Laboratory and the Barley and Malt Research Laboratory. As the name now implies, other cereal grains besides oats and barley may be researched at the facility. What are your plans for the Cereal Crops Research Unit? Will there be a dilution effect on the barley and oats research effort if other crops are now studied at the facility?

Answer: The Cereal Crops Research Unit is in fact a combination of the former Oat Quality and Barley and Malt Research Laboratories. The research at the laboratory continues to be focused on oats and barley. We have no plans to alter the program to include research on other crops.

Question: USDA funding for the laboratory has been relatively flat while support from industry has almost doubled in the last three years. Is the department making provision to respond to this industry commitment with additional funding and personnel?

Answer: We are very pleased with the development of this laboratory and consider it to be highly productive. While we recognize that additional facilities and staff could be well utilized, there are no plans in the current budgetary climate to provide additional funding or personnel to the laboratory.

BARLEY RESEARCH PERSONNEL

Question: What is the rationale for the drastic reduction in USDA-ARS barley workers in the last 15 years from over 18 Standard Man Years (SMY) to less than 12 in 1985? Will some of the new basic research effort now occuring within ARS, especially in the new high technology genetic engineering area, be applied to barley? If so, to what extent will barley research funding be provided when compared to the other feed grain research?

Answer: Although barley staffing has declined in the last 15 years, overall ARS expenditures for barley research are now higher than ever before. This is a reflection of the increased cost of adequately supporting our research scientists. We currently budget about $150,000 per scientist per year, whereas, 10 years ago less than half of this amount was needed. Barley will definitely benefit from new research thrusts in genetic engineering and other biotechnology approaches. Although not oriented specifically toward barley, new programs designed to produce crops with greater disease and drought resistance, higher yields, etc., will have applicability to a broad range of cereal crop commodities.

BARLEY YELLOW DWARF VIRUS

Question: A disease called Barley Yellow Dwarf Virus is becoming more prevalent and a major problem on a national level? Since this disease affects not only barley, but also wheat and oats, are there any USDA-ARS plans for a coordinated barley, oat, and wheat research effort to control this virus?

Answer: We are aware that the barley yellow dwarf virus is a serious problem in wheat, oats, and barley and our research is coordinated with respect to the major cereal crop hosts. We have learned a great deal about the biology of this virus over the years. Current research deals with understanding how the virus is spread by insect vectors. These findings have broad applicability to barley, oats, and wheat. In other programs, the emphasis is on developing improved germplasm for resistance to this virus and in releasing germplasm of wheat and oats that is tolerant of the virus. Many new varieties have been developed and are being grown. Cooperators in some States are also making notable improvements in barley germplasm.

NATIONAL BARLEY GERMPLASM COLLECTION

Question: I understand that the national barley germplasm collection is now being evaluated and catalogued at an annual cost of approximately $100,000. Why is barley germplasm research not afforded the same proportional funding, from the $1.2 million for germplasm research, as other commodities?

Answer: Accelerated research attention to the Small Grain Collection, of which barley is a part, was one of our highest priorities when additional funds became available for germplasm evaluation. Wheat and oat evaluations were begun before barley because the working groups for those crops had been more timely in preparing their evaluation proposals. The barley proposal has since been prepared and barley evaluation is proceeding with funding comparable to that for oats but less than that for the much larger wheat collection. The $1.2 million germplasm evaluation research thrust included in the FY 86 budget is largely in commodity areas which have not yet received any evaluation resources.

POTATO RESEARCH

Question: Is there any potato research currently being conducted in Michigan? If so, what is the scope of funding for such research, and how does the funding for such a new program compare on a proportional basis to programs already in existance in other areas of the country?

Answer: At the present time, ARS does not have any potato research located in Michigan.

QUESTIONS SUBMITTED BY SENATOR HATFIELD

GYPSY MOTH

Question: How much was spent for gypsy moth in FY 85 and what is contemplated for FY 86? For what programs or efforts will these dollars be directed and at what levels?

Answer: In FY 85 ARS will spend $1,078,000 for gypsy moth research. It is contemplated that the program will be supported at the same level in FY 86. These funds are used to support the following programs: virus enhancement and improved use, $240,000; pheromone chemistry, trap efficiency, and mating disruption, $187,000; exploration, importation and management of biological control agents, $295,000; sterile male technique, $75,000; mass rearing to support control actions, $132,000; and monitoring and integrated management, $149,000.

Question: What progress is being made in these research efforts?

Answer: In cooperation with APHIS, the Forest Service, and the State agricultural experiment stations, ARS has developed several methods of containing the spread of gypsy moth into uninfested areas beyond the front of natural spread. This includes the use of chemical and microbial insecticides to control the pest in inhabited forest areas. Sex pheromones are used to detect infestations and as population controls in lightly infested areas. Also, we are presently investigating the potential use of parasites imported from Europe and Asia and a fungus disease imported from Japan as biological control agents.

POTATO RESEARCH

Question: How much funding for potato research was provided in FY 85?

Answer: In FY 85, we provided $5,209,000 for potato research.

Question: What is contemplated in FY 86?

Answer: We contemplate the same level of funding for potato research in FY 86.

Question: What is the percentage of research being conducted in the Northwest?

Answer: In FY 85, we plan to spend 25.3 percent of the funds in the Northwest.

Question: At what locations and at what level of funding is this research being conducted in the Northwest?

Answer: We plan to spend $312,400 at Aberdeen, Idaho; $395,300 at Yakima, Washington; and $612,600 at Prosser, Washington.

TCK SMUT

Question: Please provide for the record research objectives that have been accomplished thus far in the TCK smut program and those objectives that remain.

Answer: We have learned a great deal about the behavior of this smut fungus. Several varieties of wheat with resistance to TCK smut have been developed. Where these varieties are grown the disease is no longer a problem. We have also discovered a seed treatment that is effective for wheat sown late in the season. Current objectives are to develop additional varieties with resistance to new races of the fungus, to develop fumigation procedures that will destroy the fungus in stored grain, and develop methods to distinguish the TCK fungal spores from those of other smut fungi when found in stored grain.

Question: Has the market objection to TCK smut in the People's Republic of China been removed? If not, what can be done to remove that objection?

Answer: No, the market objection has not been removed. The TCK disease apparently does not occur in the People's Republic of China and we are convinced that this disease cannot establish itself there because the environment is not right for growth and reproduction of this fungus. We continue to gather data on environmental requirements of the TCK fungus which we think will further prove that TCK is no threat to that country.

Question: What is the potential export market for Pacific Northwest wheat should the objection be removed?

Answer: The U.S. Wheat Associates project that the People's Republic of China will import 9.5 million tons of wheat in 1985. If U.S. prices are competitive on world markets, 3 to 4 million tons could originate in the Pacific Northwest.

HOPS RESEARCH

Question: What is the current level of funding for hops research?

Answer: The current level of funding for hops research is $201,000.

Question: At what facilities and at what levels of funding is it being provided:

Answer: All of the funds are allocated to the ARS program at Corvallis, Oregon, but $75,000 has been contracted to Washington State University for extramural research on hops at Prosser, Washington.

Question: How much funding will be provided in FY 86?

Answer: We plan to provide the same level of funding in FY 86.

Question: At one time, USDA proposed a phase-out of the hops research program. What is the status of that proposal?

Answer: We plan to maintain the hops research program at the present level of funding.

CALICIVIRUS RESEARCH

Question: A total of $80,000 was provided in both FY 84 and FY 85 for calicivirus research at Oregon State University under a cooperative agreement with ARS. Will this agreement be renewed in FY 86? At what funding level?

Answer: No agreement is planned beyond FY 1985. The research now in progress is expected to adequately answer the major calicivirus research questions. When this research is completed and provided to ARS, a determination will be made as to the relative need for additional research on caliciviruses.

Question: What research objectives have been accomplished and what objectives remain?

Answer: The two research objectives as stated in the FY 1984 agreement were the following: (1) Conduct studies of calicivirus isolated from their natural hosts and explore the possible avenues of exotic calicivirus exposure in domestic livestock. (2) Study the relatedness of the calicivirus of diverse origin and do fundamental research on this group of viruses which may provide laboratory indicators of pathogenicity for domestic farm species.

In FY 1984, the progress report from Oregon State University indicated that swine infectivity studies have been run on two caliciviruses. A number of procedures were underway to help characterize the caliciviruses that pose a threat to the livestock industries. During this period, a chapter entitled "Vesicular Exanthema of Swine and Related Caliciviral Diseases" was published in the U.S. Animal Health Association book, "Foreign Animal Diseases." Other publications are in print. Considerable progress has been made on plaquing characteristics associated with possible pathotypes of virus. Several new calicivirus types have been isolated. Work is continuing under the FY 1985 cooperative agreement.

TREE FRUIT RESEARCH

Question: What level of funding was provided for tree fruit research in FY 85?

Answer: We plan to provide $11,634,400 for tree fruit research in FY 85.

Question: What levels are contemplated for FY 86?

Answer: We plan to provide the same level of funding in FY 86.

Question: At what facilities will this research be conducted and at what funding levels?

Answer: We have tree fruit research at 25 research locations: Booneville, Arkansas - $260,200; Albany, California - $509,600; Davis, California - $236,200; Fresno, California - $832,100; Riverside, California - $128,900; Miami, Florida - $15,800; Athens, Georgia - $445,700; Byron, Georgia - $1,074,900; Savannah, Georgia - $45,700; Vincennes, Indiana - $182,400; West Lafayette, Indiana - $116,200; Beltsville, Maryland - $1,429,800; Frederick, Maryland - $28,200; East Lansing, Michigan - $182,400; New Brunswick, New Jersey - $485,200; Otis Air Force Base, New Jersey - $28,200; Wooster, Ohio - $54,400; Wyndmoor, Pennsylvania - $289,300; Lane, Oklahoma - $162,200; Corvallis, Oregon - $69,000; Prosser, Washington - $45,600; Wenatchee, Washington -$1,092,600 Yakima, Washington - $1,279,700; Kearneysville, West Virginia - $2,562,900; Rotterdam, Netherlands - $77,200.

Question: What percentage of this research is being undertaken in the Pacific Northwest?

Answer: About 21.4 percent of this research is being conducted in the Pacific Northwest.

Question: What research objectives have been accomplished at the Pacific Northwest facilities?

Answer: At Wenatchee, Washington, we have established that chemical fruit thinning sprays can be used to control alternate bearing; growth regulators can be used to influence tree growth, flowering, fruit set, and fruit quality; and controlled atmosphere storage can reduce storage losses and maintain fruit quality. We also have a better understanding of the physiology of cold hardiness and how fruit viruses affect commercial production. At Corvallis, Oregon, we have found improved and rapid methods of detection of fruit viruses. At Yakima, Washington, we discovered a pheromone to assist in coddling moth control; developed crop residue data to support registration of insecticides; developed sterile insect techniques to help reduce insect populations; and developed fumigants to meet quarantine requirements for fruit exports. This research has helped the Northwest fruit industry increase fruit production by 167 percent over the last 20 years.

Question: What objectives remain?

Answer: In view of the increased fruit production capacity of the Northwest, the most important research objectives now include those that relate to fruit storage and quality; reduction of storage losses; research to help promote fruit exports; and continued emphasis on reduction of production costs. We intend to emphasize areas of research which implement and support State and industry research programs.

Question: Do these objectives include increased funding for research that supports exports of fruit, such as decay control, improved packaging, storage, etc? If not, why is this not being pursued? What level of funding would be needed to pursue these matters?

Answer: Approximately 78 percent of ARS tree fruit research, or $9,121,900, are directed toward improving technology for production efficiency and removing technical barriers to marketing. We believe the present ARS level of funding is adequate to meet these highest priority research needs of the industry.

Question: What is the potential for export of Pacific Northwest tree fruit?

Answer: There appears to be a considerable potential for exports of tree fruits from the Pacific Northwest. Demand is increasing for fresh fruit in most countries of the world and particularly in the Pacific Rim countries. Shipments of exported fruit have been well received to date but because of the high value of the dollar in recent years, the full potential of exports has not been achieved. Some countries also have stringent import requirements which make it difficult to export fruit. There also are concerns on the movement of exotic pests and continuing concerns on the level of chemical residues. ARS research is directed toward these problems.

FORAGE SEED CENTER

Question: Should the rescission for the Forage Seed Center in Corvallis, Oregon, not be approved, when would construction of the Center begin? When would it be completed? How many scientists would be located there? What research efforts would they be pursuing? What level of funding would be required to ensure that the facility is being fully utilized for forage seed research?

Answer: Construction would begin by August 1, 1985, and be completed within 12 to 18 months thereafter. The Center is designed to house nine ARS scientists. The scientists would address the control of diseases, insects, and weeds in forages grown for seed production. They would also design and test new methods to separate seeds from contaminants. The research requires support of about $150,000 per scientist per year.

Question: What level of funding for forage seed research was provided in FY 85? At what facilities was this research conducted and at what funding level?

Answer: The FY 85 funding levels and locations for forage seed research are: Corvallis, Oregon, $600,300; St. Paul, Minnesota, $336,300; and Stillwater, Oklahoma, $270,100.

Question: What research objectives were accomplished in FY 84, what objectives are being pursued in FY 85 and what remain to be accomplished?

Answer: In FY 84, ARS scientists provided endophyte detection methods for the seed industry, improved weed management through chemical control, developed phermone trapping techniques to reduce insecticide usage, and developed image sensing techniques for seed contaminant separation. In FY 85, ARS will conduct additional research on use of phermones, endophyte fungus, and reduction in fungicide use and field burning.

Question: What level of funding is provided for forage seed research in FY 86 and at what facilities and funding level for each facility?

Answer: We anticipate the same level of support for the forage seed production research in FY 86 as in FY 85.

QUESTIONS SUBMITTED BY SENATOR CHILES

EMERGENCY CITRUS CANKER RESEARCH

Question: I know you are aware of the very serious problem Florida faces regarding the outbreak of the dreaded citrus canker. This disease literally threatens the viability of the citrus industry and is therefore of great concern to me. I would like to know about the status of the emergency citrus canker research program that was included in the continuing resolution last fall. You'll recall this program, as part of the Agricultural Research Service was funded at $1 million for FY '85.

o Will this important program be continued in FY '86?

o Will it receive $1 million in the coming fiscal year?

o Will it be structured and administered in the same way?

Answer: Several scientists were redirected to work on the citrus canker problem within ARS and by the University of Florida. The result is that effective and acceptable fruit treatments have been developed that will prevent spread of the disease via exports. A cooperative research agreement was established between the ARS and the University of Florida that includes a multiple approach to dealing with canker via research on the pathogen, the disease, and on methods to control it. The University of Florida has initiated a cooperative research agreement with Argentina, where the disease is endemic, to pursue field work lines of research that cannot be conducted in the U.S. such as how the disease spreads, how soils can be decontaminated in groves, and to develop methods to chemically treat diseased groves. Research has shown that the bacteria can be destroyed in soils by chemicals that are already registered for use in citrus groves; and that the Florida strain of this bacterium is quite different biochemically from better known strains. Research will continue at the $1 million level in 1986 and will be administered in the same way as in 1985.

AGRICULTURAL RESEARCH STATIONS

Question: Mr. Secretary, two years ago the Agricultural Research Service (ARS) proposed elimination of several important research stations in Florida. The committee expressed its concern over this proposal by including bill language directing that current efforts at the Agricultural Research Stations at Belle Glade and Lake Alfred, Florida, be continued and that participation in the soil, water, air, and plant (SWAP) program located at Ft. Pierce, Florida, be maintained. Is it the intention of the USDA and ARS to maintain these stations in Fiscal Year 1986 at the past funding and service levels?

Answer: Yes, ARS will continue the research in FY 86 at Lake Alfred, Belle Glade, and Ft. Pierce at FY 85 levels.

Question: Would you detail for me the Department's recommendations in regard to these stations?

Answer: At Lake Alfred, ARS will continue to support the citrus engineering program in 1986. We also intend to strengthen the program by better linking it with the ARS Horticultural Research Laboratory at Orlando to conduct research on citrus production systems including pesticide application research. At Belle Glade, ARS will continue the sugarcane engineering program in 1986. This program will also be strengthened by integrating it with ARS sugarcane production research at Canal Point, Florida. The ARS program at Ft. Pierce is already closely linked to soil-water-plant research at Gainesville. We intend to support the Ft. Pierce program in 1986 with a post-doctoral scientist and technician to work on citrus problems relating to drainage, soil acidity, irrigation, and effect of rootstocks on citrus yield and quality.

TROPICAL-SUBTROPICAL RESEARCH

Question: In the years since most of the responsibility for tropical-subtropical research was shifted from ARS to CSRS, ARS has still maintained approximately $735,000 in funding for this program. Is this amount included in the FY 86 budget?

Answer: Yes, this level of funding is included in the FY 86 budget. At Mayaguez, Puerto Rico, $560,000 will be used for tropical crop protection and germplasm development research. At Hilo, Hawaii, $175,000 will be used to develop quarantine treatments to insure marketed tropical fruits are free of pest insects.

BIOLOGICAL CONTROL OF PESTS AND WEEDS

Question: Would you provide me with the latest information regarding USDA involvement in biocontrols in terms of project participation, manpower and funding?

Answer: ARS has extensive programs in the biological control of weeds, plant diseases, nematodes, and insects. The biological control program in ARS involves research on the acquisition, evaluation, and distribution of biological control agents; genetics and genetic engineering of biological control germplasm; fundamental biology of microorganisms, insects, and nematodes to control weeds, diseases, and insect pests; the development of biological controls for insects and weeds of forage crops, pastures and rangeland; insects, weeds, and diseases of field and horticultural crops; weeds of aquatic environments; insects attacking man and animals; and biological control of insects and pathogens of harvested commodities. In 1985 there were approximately 160 scientist years of effort in ARS in biological control research supported with $13.4 million. The Cooperative State Research Service also has biological control research programs in Land-Grant Institutions supported with $5.8 million in Federally appropriated funds.

Question: Do you consider biocontrol research important and necessary given our concern over the environment?

Answer: We consider biological control to be very important and a high priority area of research in ARS. Biological control is one of the key elements in integrated pest management systems and holds considerable promise to reduce any adverse impacts of many current pest control practices upon the environment. Biological control technology also is expected to reduce high costs of farm production.

Question: How does the current and projected effort in the Department regarding biocontrol research compare to past efforts (manpower and funding)?

Answer: During the past several years, ARS has expanded its research program in biological control especially in the development of biological agents for control of weeds and soil-borne plant diseases. In FY 1980, approximately $10.2 million was used to support biological control programs. In FY 1985, support is $13.4 million. The anticipated FY 1986 level of effort is expected to be the same but, over the next 5 years, ARS plans to increase support of research on biological control programs as resources and opportunities permit.

Research allocations surrounding uses of beneficial organisms for control of pests at the State agricultural experiment stations and other cooperating institutions have increased steadily. In fiscal year 1978, a total of 119 scientist-years were committed, utilizing $10.7 million of Cooperative State Research Service (CSRS), other Federal, and non-Federal funds. This research primarily emphasized control of insect pests. For fiscal year 1983, 175 scientist-years were committed with the use of $23.1 million of CSRS, other Federal and non-Federal funds. This research is more interdisciplinary in nature however, addressing control of major insect, nematode, disease, and weed pests.

MOLE CRICKET RESEARCH

Question: I understand Federal support of mole cricket research will be terminated at the end of the fiscal year.

Since mole crickets pose a threat to all of Florida and other parts of the Southeast, why is this research being terminated?

Answer: A Cooperative Agreement with specific objectives and duration has been negotiated with the University of Florida to conduct cooperative research on mole crickets. The present Agreement will expire September 30, 1985. ARS will review the progress made on the present Agreement and if the need for continued cooperative research is justified, ARS will extend the present Agreement through FY 1986.

Question: Do you believe the mole cricket problem is solved?

Answer: Significant progress has been made in understanding the population dynamics of mole crickets in various agroecosystems including pasture, turf, and annual crops. This information provides the basis for the development of integrated control programs. The problem will not be totally solved until methods have been developed to economically suppress mole cricket populations below damaging levels.

Question: Over the years, ARS has cooperated in research on Diaprepes and the lesser cornstalk borer. Do you anticipate future ARS participation in this research?

Answer: Yes, ARS plans to continue research on both pests through inhouse research programs. Cooperative research will also be supported when needed and when this is the most efficient approach.

Question: If not, why?:

Answer: While ARS plans to continue the research within the foreseeable future, we would discontinue the research when the major objectives have been accomplished or when higher priority research must be funded within available resources.

SOUND DETECTION OF CARIBBEAN FRUIT FLIES

Question: Would you bring me up to date on research on the detection of Caribbean fruit fly larva using sound/sonar devices?

Answer: Technology has been developed to detect all Caribbean fruit fly larva feeding in citrus fruit except those less than 24 hours old. We must determine the feeding behavior of larva, such as how long they feed and when they do not feed, so that all stages of infestation can be detected. The equipment must also be improved to increase sensitivity and to eliminate extraneous noises that would be encountered in a packing plant.

Question: What in-house work is being done on this project?

Answer: The equipment improvement and adapting it to various commodities is proceeding at our Gainesville, FL laboratory. Use of the equipment for the Caribbean fruit fly in grapefruit and mango is in progress at our Miami, FL lab; for the Mexican fruit fly in citrus and mango at Weslaco, TX; for the codling moth in apples at Yakima, WA; codling moth in walnut and stone fruits at Fresno, CA; and three species of fruit flies in papaya at Hilo, HI.

Question: Is a commercially available detection device going to be ready any time soon?

Answer: Experimental results are very promising, but a device suitable for industry use will not likely be available within the next 2 years.

QUESTION SUBMITTED BY SENATOR SASSER

REDUCTION OF TRAVEL

Question: Although you are requesting an appropriation which essentially freezes most programs under your jurisdiction, you are budgeting a reduction in your travel budget. Travel will be reduced to $4 million 880 thousand from $5 million 246 thousand. How are you accomplishing this reduction?

Answer: The travel reduction proposed in 1986 results from both Congressional and Executive efforts to reduce Federal spending. The ARS reduction is less than 7% and will be accommodated across agency lines by implementing belt-tightening procedures to eliminate or reduce lower priority travel requirements. Despite the reduction, all travel essential to our research program will continue.

QUESTION SUBMITTED BY SENATOR BUMPERS

SOUTH CENTRAL SMALL FARMS RESEARCH CENTER

Question: For FY 1985 Congress approved the construction of a permanent administration and laboratory building at the South Central Small Farms Research Center near Booneville, Arkansas. Earlier this year I was assured by the Agricultural Research Service that plans for construction were underway and that construction would begin in October. However, I understand that the Administration has now proposed the rescission of this funding. The Administration can count on my vigorous opposition to this rescission. What is the justification for the proposed rescission?

Answer: Funds for the construction of the South Central Small Farms Research Center have been proposed for rescission in FY 1985 along with funding of seven other facilities totaling $37.9 million. The rescission has been proposed to assure a more effective use of existing facilities which are currently underutilized and to eliminate excessive Federal spending in an effort to help reduce the budget deficit.

QUESTIONS SUBMITTED BY SENATOR BYRD

APPALACHIAN SOIL CONSERVATION LABORATORY

Question: As you know, I have a continuing interest in the Appalachian Soil Laboratory at Beckley. This is a fairly new laboratory and has great potential for developing new approaches to increase the world's food production in mountainous areas.

The Fiscal Year 1985 Appropriation Bill for the Department of Agriculture provided an increase in funding for the Appalachian Soil and Water Laboratory at Beckley of $99,000 for the hiring in FY 1985 of a research soil scientist with training in computer science. When do you expect to bring such an individual on board?

Answer: This position has been widely advertised. Candidate selection should begin about May 1, 1985.

Question: The Senate report accompanying the FY 1985 Bill also included language directing the Department to furnish the Committee with a full report on what its plans are for staffing and equipping of the Beckley facility along with a report on the appropriations necessary.
When will that report be forthcoming?

Answer: This report was transmitted to your office March 8, 1985.

COOPERATIVE STATE RESEARCH SERVICE

QUESTIONS SUBMITTED BY SENATOR COCHRAN

SPECIAL RESEARCH GRANTS

Question: Isn't eliminating the special research grants going to leave major gaps in research needs? Even if states determine that certain topics are of high priority and they want to use other funds to continue or initiate research efforts previously handled through special grants, the bottom line is going to be that other research efforts will have to be abandoned. The budget for Hatch Act and related base-funded programs are not being increased, so funds are going to be scarce. Aren't you really proposing to reduce the amount of research done by millions of dollars if special grants are terminated?

Answer: The amount of research being done will be reduced as a result of the need for total Federal budget restraint which we all must share. Due to the discretionary nature of the Hatch Act and related formula base funded programs, amounts allotted to State institutions permit the institutions to fund research in those areas that they identify as high priority. This flexibility can provide for maintaining the highest priority programs.

Question: These special grants have concentrated on problems of national interest beyond normal emphasis in formula programs. Is it, therefore, logical to assume that states will pick these up through the formula funds?

Answer: Recognizing that the budget has proposed that the formula base funded programs be maintained at level funding it will be necessary to reassess research priorities. In this process it is anticipated that some research now being funded through the Special Research Grants program will be addressed through the formula funds.

STATE AGRICULTURAL EXPERIMENT STATIONS

Question: I was particularly pleased to hear you discuss Church's Fried Chicken's contract with the Mississippi catfish farmers. This is an important development for my State, and you have quite vividly outlined the tremendous impact this has had, and will have, on the State's economy. You describe the success of the research which led to this as an example of collaborative research having a great payoff. Is the University of Nebraska ecofallow study another example of collaborative funding? It has also had an impressive payoff.

Answer: Ecofallow is a tillage and cropping system developed for the lower rainfall regions of Nebraska and Kansas. Ecofallow is a collaborative funding approach, and future improvements in the technology will require continued collaboration. State and Federal resources have supported research programs into development of crop varieties, tillage practices, fertilizer use, pest control practices, and cost benefit values including the reduction in soil erosion.

Industry is contributing in those areas where private industry has traditionally been successful; seed and fertilizer production and marketing, development of specialized equipment for untilled fields, and the development of new pesticides, especially herbicides. Weed control is essential to the success of ecofallow. While we are addressing State, Federal and private collaborative funding in developing this technology, we should not overlook the tremendous collaboration among the various segments and political subdivisions of public sector research, extension and education, as well as the public, private collaboration to develop the educational programs in the adoption of ecofallow technology that have been so important to the success of this effort.

AQUACULTURE

Question: How much emphasis is being given to aquaculture research today? Are efforts underway to expand aquaculture activities? What are some of the major topics in this subject area that need to be researched?

Answer: In fiscal year 1985, $3.8 million of Cooperative State Research Service funds were devoted to aquaculture research in State agricultural experiment stations. In addition, $8.9 million of non-federal aquaculture research were funded. As a result of the need for reduced spending, fiscal year 1986 support for aquaculture research from CSRS funds will be reduced.

The commercial aquaculture industry has a number of major research needs. Control of water quality, which varies widely under different production environments, continues to be very important. The two water problems most difficult to control are algae growth and proper oxygenation. Much more basic and applied research will be required to determine the genetic potential of the many aquaculture species. Also, disease control and prevention continues to be a major economic handicap to production. In addition, optimum nutritional and reproduction requirements of both the major and minor species must yet be determined.

RESEARCH FUNDS FROM INDUSTRY

Question: You mention that 10 percent of the research funds being spent today come from industry. Are there certain areas or topics of particular interest to industry?

Answer: Industry interests of course are related to those areas in which there is potential for a benefit to the industry involved. In general this has included research on use and efficiency of chemicals, basic genetics, and biotechnologies.

Question: Are there any which might differ from experiment station priorities?

Answer: Both the experiment stations and industry are interested in seeing research conducted that will support the needs of agriculture. However, the ranking of priorities will likely differ. The experiment stations will be looking at the overall needs and will be assigning priorities to one area as opposed to another based on the total picture. The industry priorities on the other hand may be in terms of those areas of research that will most nearly meet the needs of a specific segment or part of the agricultural industry.

Question: Are you actively promoting participation by private enterprises? Is special effort being made to expand the funding base by actively recruiting new "partners?"

Answer: A significant approach to broader involvement of private enterprise in agricultural research has been to have representatives in the formal planning structures for agricultural research. The Joint Council on Food and Agricultural Sciences and its National Agricultural Research Committee have industry representatives taking part in the discussions on priorities and how these priorities will be met. Through the sharing of information on research needs and intentions in the public sector, the private organizations are being encouraged to participate more fully in agricultural research. Where joint funding does not conflict with scientific integrity, many stations encourage industry contributions.

Question: How are research priorities determined when there are so many funding sources in the State agricultural experiment station system (i.e., Federal, State, private)?

Answer: The administrative structure of the State agricultural experiment station system involves a director in each State who is in control of funds from all the different sources. These State directors are involved in the priority setting process at the State, regional, and national level and thereby partners in a meaningful system in which the individual in control of the funds from all sources is the one who coordinates the priority setting process.

Question: Could you please elaborate on your statement that sponsors of specific research projects have a clear and definite role on what is done with the money provided? Does this imply that there is potential for industry or others to bias research direction, or perhaps even results?

Answer: What is meant here is that a sponsor has the opportunity to define the area of research that would be supported by that individual or organization. The experiment station director then can react to this request and so long as the area of research is within the program of the experiment station it can be strengthened as the result of the individual sponsor. However, it is not the intent to allow the sponsoring organization to move the research in a direction inconsistent with the mission and goals of the experiment station. It especially would not be undertaken if there was any implication of the support introducing bias in the results that might be obtained.

Question: Who has leadership when funds from various sources are combined on projects?

Answer: At the project level the individual scientist would normally provide leadership in planning and carrying out the research. However, the work of the individual scientist is always subject to review by the appropriate department head and/or experiment station director.

Question: I find it very interesting that State appropriated funds account for 53 percent of the research pool, compared to 19 percent from CSRS appropriated funds, 3 percent from other USDA sources, and 9 percent from other Federal sources. Has the percentage coming from States changed over the years? What has been the traditional Federal-State shares?

Answer: The information follows.

Percent of Funding for Agricultural Research
National Total - SAES and Other Institutions

Fiscal Year	CSRS	Other USDA	Other Federal	State Appro.	Other Non-Federal	Total
1983	18.7	3.5	8.7	52.6	16.5	100.0
1978	19.8	2.4	8.5	55.0	14.3	100.0
1973	19.8	1.9	7.5	56.2	14.6	100.0

SHARED PERSONNEL

Question: In your November experiment station letter, Dr. Jordan, you stated that "in order to meet expanding demands on the State agricultural experiment station system, CSRS and the universities are moving in the direction of shared personnel." Would you please explain this system and how it works. Have you been able to lower your staff years as a result?

Answer: To meet some of the common needs of CSRS and the State agricultural experiment stations, arrangements are being made for State scientists to continue to work at their base location, but devote a part of their time to performing certain activities on behalf of the entire system. This would normally involve work in planning, coordination, and evaluation of research. This involves some travel to Washington and to other research locations to participate in on-site reviews and planning sessions. The cost of these activities is jointly covered by the cooperating institution and CSRS. By using this mechanism, it has been possible to continue to meet some of the priority obligations which might have been curtailed at a time when we have experienced a recent reduction in overall staffing for the Agency.

HIGHER EDUCATION

Question: There was a TV show the other night that stressed the great number of occupations that are related to agriculture, a fact not widely understood by the general public. It also talked about the growing shortage of people trained to fill these jobs. What is the situation today? How many more trained people are needed to fill ag-related jobs? What types of specialization are needed?

Answer: The agricultural higher education community as a whole, including the USDA, is concerned about the lack of public awareness and understanding of the multiplicity of career options available in the food and agricultural sciences. Many believe that the career image of agriculture as "farming and ranching" is a significant factor in explaining recent trends showing a 32% decline in undergraduate enrollment at land-grant colleges of agriculture from 1977 to 1984 and a 4% decline in graduate enrollment at land-grant colleges of agriculture during this same period. Expectations are that these trends will continue through the remainder of this decade. At this same time, there is expected to be an 8% decline of high school graduates in the 18 to 24 year old age category between 1981 and the year 2000. Additionally, according to the most recent data available, projections on the availability of expertise in the food and agricultural sciences are showing an approximate overall annual shortfall of 15%, with much higher shortages in some specific employment categories. For example, the annual shortage of Administrators/Managers/Financial Advisors runs as high as 30%; for Manufacturing and Processing Scientists and Engineers as high as 18%.

Question: Was the higher education fellowship program helping steer people in the directions needed to meet the demands in ag-related fields?

Answer: Yes, the USDA Graduate Fellowships Program is effective in attracting talented individuals into fields identified as serious shortage areas of scientific and professional expertise. The Fellowships Program specifically selected targeted specialties based on the most recent supply/demand data available. The following fields were identified for support in this program: biotechnology, agricultural engineering, food and agricultural marketing, and food science/human nutrition. Fellows were awarded in each of these areas as follows: biotechnology, 89 doctoral; agricultural engineering, 23 doctoral and 53 master's; food and agricultural marketing, 66 doctoral; and food science/human nutrition, 20 master's in food science and 51 doctoral in the combined field.

Question: You have proposed termination of the higher education graduate fellowships program that was begun two years ago. Isn't at least one more year of funding needed to give this program an adequate trial, and to ensure continuing commitment to those graduate students already in the program?

Answer: The Department is not requesting these funds as part of the President's budget. Funds available in fiscal years 1984 and 1985 will provide significant support to individuals in the fields identified as shortage areas. Support for the development of agricultural expertise will be provided indirectly through the Competitive Research Grants program and through the provisions of the Hatch Act and related base formula funded programs.

Question: What has been accomplished with the graduate fellowships program so far? What types of responses have you had from students? Ag industries? Universities?

Answer: A total of 73 different institutions submitted proposals for graduate fellowships grants. Based on peer panel review and evaluation, 67 proposals (46% of those received) were selected for funding. These 67 grants support 302 graduate fellows at some 47 different institutions in 35 states across the Nation. The program was developed based on comments received from universities, ag industries, and other agricultural higher education participants. University administrators nationwide have attested to the unique ability of the fellowship program to develop needed expertise by targeting specific shortage fields, by attracting outstanding scholars and preparing them to become future scientists, and by providing training for fellows at institutions recognized for academic and research excellence in the targeted national need areas.

Question: The $2.8 million Morrill-Nelson program has provided historic support to land-grant institutions. What impact will eliminating these funds have on their budgets?

Answer: Historical data available on use of these funds indicates that the monies are most frequently used for faculty salaries, therefore, this support wil be terminated. Since these funds have remained steady at the $50,000 level for each State and territory since 1907 they are a small portion of total institutional support and are not considered a major source of funding.

1890 INSTITUTIONS

Question: You have requested $2 million for strengthening grants to 1890 schools. What is the basis for this proposal?

Answer: In recent years, the research programs and facilities at land-grant institutions have been strengthened through a variety of mechanisms. The Department believes that a Strengthening Grants program targeted to instructional programs at the 1890 land-grant institutions, Tuskegee, and the University of the District of Columbia will better enable these institutions to function on a par with the 1862 land-grant institutions in training the requisite professional expertise for our modern agricultural system.

Question: What impact would these funds have?

Answer: These funds currently are apportioned among the 18 eligible institutions and provide approximately $107,000 dollars per institution. This is a significant appropriation for these institutions and is a valuable means for strengthening their resident instruction programs aimed at producing scientists and professionals for the food and agricultural system.

Question: I believe last year you indicated that, while small in dollars, Morrill-Nelson funds were very important to 1890 institutions' budgets. Would the $2 million grants offset losses caused by the termination of Morrill-Nelson funds.

Answer: Yes, the 1890 institutions would receive an increase in funds as a result of this Strengthening Grants program. The funding the institutions would receive would facilitate planning and development of teaching programs.

Question: Why is this grant approach better than the $2.8 million distribution from Morrill-Nelson?

Answer: Morrill-Nelson funds by law are distributed to state treasurers who in turn allocate the funds to support resident instruction programs at land-grant institutions. It is at the discretion of the State to decide the distribution in the event the State has both an 1862 and an 1890 institution. In the Strengthening Grants program the funds go solely to the 1890 institutions.

BIOTECHNOLOGY

Question: USDA has used biotechnology for over a hundred years to improve American agricultural productivity. The newest developments in biotechnology, including genetic engineering of plants, animals, and microorganisms, offer further opportunities to strengthen American agriculture.

The potential benefits of biotechnology in agriculture, however, are counterbalanced by public and Congressional concern about its safety. The issue of risk is assuming greater importance now as researchers and companies want to begin releasing genetically engineered organisms into the environment. What can USDA do to effectively reassure the Congress and the public that it can maximize the benefits and minimize the risks of biotechnology?

Answer: To maximize the benefits it will be necessary to provide effective means of assessing possible hazards with experiments or release of modified organisms that will ensure that those that are not unduly hazardous will have an opportunity to go forward. Minimizing risks likewise requires that there be a systematic and effective approach to assessing the risks involved. The USDA and the Land-Grant University System are formalizing a system that would draw upon the highest qualified scientists to review either proposals or protocols within proposals that would make an assessment of the risks for a particular class of experiments or organisms. No additional funding is requested for this initiative. The system would make full use of the vast amount of data that already exists about various kinds of organisms. It further would provide a more formal mechanism to monitor what happens to modified organisms once they have been introduced into the environment.

Question: How will USDA handle the increasing number of proposals for planned releases of genetically engineered microorganisms into the environment.

Answer: The USDA and Land-Grant Colleges are establishing the National Biological Impact Assessment Program. This will be built upon expertise of highly qualified scientists from all over the country. The system will operate in close coordination with regulatory offices of USDA and other Federal agencies with biotechnology regulatory responsibilities. It will also provide a data base upon which "least risk" test sites can be selected for specific experiments.

ICE-NUCLEATING GENE

Question: Dr. Jordan, in your statement, you mention the ice-nucleating gene, which, if isolated and eliminated, could lower the freezing point for plants, especially citrus. As you pointed out, the enormous losses suffered by the citrus industry could have been reduced had this process been available this year. What is the current status? How soon will we be able to have the process available for widespread use?

Answer: Extensive studies have been completed in the laboratory involving a number of different plant species. However, field experimentation is still being held up by court order. The availability of this technique for widespread use must await further actions by the courts.

NATIONAL BIOLOGICAL IMPACT ASSESSMENT PROGRAM

Question: You mention that you will break new ground in FY 1986 by establishing a National Biological Impact Assessment Program. How will this be funded?

Answer: The USDA and the National Association of State Universities and Land-Grant Colleges Division of Agriculture Committee on Biotechnology are in the process of formalizing a national program to assess the biological impact of the release of organisms containing recombinant DNA (r-DNA) for agricultural use. Although the program is not yet official policy, the specific details of the program are under review by the Federal agencies and the research universities. Funding for the National Biological Impact Assessment Program in FY 1986 will be from available appropriated base funds.

Question: Will this be an on-going program?

Answer: In order to handle the increasing number of proposals and make full use of the vast amount of data that already exists, it is anticipated that this program will continue into the foreseeable future.

Question: What mechanism is being planned to keep the information current?

Answer: An interactive data base is planned for the system. As new experimentation is completed the data will continually be fed into the system.

Question: Who will be providing data to go into the system?

Answer: Scientists, both Federal and non-Federal, throughout the country will be participating and providing data into the system.

Question: Who will use the system, and through what mechanism? Will user fees be applied?

Answer: The National Biological Impact Assessment Program is visualized as a highly participatory system with many points of entry, both in research and application of findings. The primary points of contact will be through officers and committees that already exist at most universities, Federal laboratories, and private laboratories. It is anticipated that the system would be used by all parties interested in introducing products of the new biotechnologies into the environment.

User fees are not contemplated at this juncture, due to the participatory nature of the system. However, an industry or private applicant to the system will of necessity have participatory obligations to the entire system. The nature of these obligations will be based on the demands placed on the system by the applicant.

PESTICIDE CLEARANCE

Question: Nursery crops are often very important locally and regionally, yet there are frequently no pesticides to meet quarantine requirements or to meet the market demand for high quality plants. Because of the high cost of pesticide registration for nursery crops, nurserymen often cannot legally use pesticides that the wheat and corn growers on adjacent farms can use. For the past seven years IR-4 has greatly assisted in getting more prompt registration of pesticides for use on these special crops. With the elimination of the IR-4 Special Grants, what methods are being proposed by USDA to quickly label pesticides for nursery crop use?

Answer: Since the IR-4 project was expanded in 1978 to conduct research on commercial ornamental and nursery plants, more than 5,600 new Federal registrations have been obtained for uses of a wide array of pesticides on these specialty crops. These new registrations address the most urgent needs as expressed by IR-4 liaison scientists and growers in the states, and represent approximately 60 percent of all registration requests received. Ornamental and nursery registration requests will continue to be submitted to IR-4 by state liaison representatives because these scientists are impacted only indirectly by elimination of the Special Research Grants. Since costly analytical chemical determinations of pesticide residues and metabolities are not required in the ornamentals registration process, the IR-4 project coordinators, who receive funds predominately from the Hatch Act, Regional Research Fund, will be able to address the remaining high priority needs through interactions with State and Federal researchers having funding sources other than Special Research Grants.

Question: With the nursery and florist crop portion of the program cancelled, nurserymen and florists will again be forced to wait six to ten years for needed registrations if they are obtained at all. How can the Department justify the elimination of the Special Grant for Pesticide Clearance in the CSRS budget when so many are clearly dependent on it? Is there a substitute for the IR-4 program?

Answer: The Special Research Grants on Pesticide Clearance have concentrated on pest control research beyond the normal emphases provided by the formula programs. The Hatch Act formula and related base funded programs, along with State funding, comprise the core of the State/Federal research partnership and provide the basic resources necessary for long-term stability of agricultural research. Programs such as the Special Research Grants, which contribute to on-going research in base funded programs, are proposed to be reduced in line with the Administrations overall reduction in Federal spending. The Hatch Act formula and related base funded programs are discretionary in nature, and thus permit institutions to fund research in areas of highest priority. Given this flexibility, the State institutions can maintain the research needed for such registrations should they so desire.

COMPETITIVE GRANTS

Question: Why do you propose to retain earmarking of Competitive Research Grants for soybean research, acid precipitation, alcohol fuels, brucellosis, reproductive efficiency, gypsy moths, boll-weevil/bollworm, and pine bark beetle, rather than having general categories of research (e.g., plant science, human nutrition, animal science, pest science, and biotechnology) as you requested last year?

Answer: In fiscal year 1986 the Competitive Research Grants program is proposed to include five general categories of research which are plant science, animal science, human nutrition, pest science and biotechnology. Portions of the plant science, animal science and pest science programs are proposed to be earmarked for specific areas of research. The specific earmarked areas were originally established by the Congress in fiscal year 1985 to emphasize certain priority areas. At least two years of experience with these particular earmarked areas of emphasis will be valuable to maximize benefits of the research. Research proposed within the objectives of the grants awarded, in these earmarked research areas, may extend for a period of up to five years. As the results of this research become known, an assessment can be made of the need for augmenting the base of scientific knowledge developed.

REGIONAL RESEARCH

Question: How are regional research funds allocated?

Answer: A 1946 Amendment to the Bankhead-Jones Act specifically authorized funding of regional research. This amendment allocated 25 percent of the increase in Hatch funding for agricultural research at the State Agricultural Experiment Stations to a Regional Research Fund (RRF) to support cooperative research on problems concerning the agriculture of more than one State. The amendment also established a Committee of Nine, elected by and representing experiment station directors, to recommend regional research projects.

The allocation of the RRF is made to approved regional research projects. The Committee of Nine assigns to each State a target value of funds on which the Station Directors can make recommendations for regional project allocation. The target value is computed from a combined total of an historic base level and an adjustment for new funds. The base level for each State is the amount of RRF funds for the preceding year. New funds are those for added support above the base level. The allocation of these funds is essentially a combination of equal distribution and a weighted formula based on existing strength in high priority programs. This process provides the Committee of Nine flexibility to fund projects of highest priority.

Question: How are priorities established?

Answer: Regional Research priorities are developed from recommendations by scientists and administrators. These projects must address complex problems which are beyond the scope of a single station. The research proposal is reviewed by the Regional Directors Association, the Committee of Nine and the Cooperative State Research Service before it is approved for funding.

Important in selecting a regional research project is the impact of the problem on two or more States, and if a comprehensive team approach may result more rapidly in solutions with greater reliability.

COMPETITIVE RESEARCH GRANTS

Question: Please provide for the record. How much of the competitive grants went to land-grant institutions? Where did the remainder of the funds go?

Answer: The information follows.

Fiscal Year 1984 Competitive Research Grants

	Grants Awarded	Dollars Awarded
Land-Grant Universities	161	$12,304,438
SAES	(112)	(8,323,920)
Non-SAES	(49)	(3,980,518)
Private Universities	21	1,652,238
Other Public Universities	11	809,500
Federal Laboratories	3	225,000
USDA/ARS	11	718,926
Private Non-Profit	12	680,958
TOTAL	219	16,391,060

1890 INSTITUTIONS

Question: What has been done with the construction money that has been provided to 1890 institutions so far?

Answer: The money has been used at the seventeen institutions in varying ways to increase their research potential. The money has been used to purchase land, buy major equipment, renovate research facilities and to accumulate funds to carry out major construction projects. Some specific completed projected are:

Alabama A&M University completed the construction of security fencing around agronomic research plots and purchased land.

Tuskegee Institute completed the renovation of two buildings housing research activities.

University of Arkansas at Pine Bluff constructed fish ponds for its major research activity, which is aquaculture research.

Fort Valley State College completed the construction of greenhouses for agronomic research. This included the installation of work benches in a previously constructed greenhouse.

Kentucky State University finalized the construction of ponds for aquaculture research.

University of Maryland-Eastern Shore renovated small animal research space and completed the renovation of the poultry labs.

Alcorn State University completed a headhouse-greenhouse complex.

Lincoln University, Jefferson City, Missouri accumulated a sum for the construction of a new research office laboratory building.

North-Carolina A&T State University purchased major research equipment.

Langston University used some of its funds for planning construction activities and set aside the remainder for major construction.

South Carolina State College set aside funds for a planned research lab and office building.

Tennessee State University set aside funds for a major construction project.

Prairie View A&M University constructed security fences and leveled research land.

Virginia State has improved farm drainage and installed an irrigation system.

Question: This construction program is a 5-year program, with $10 million provided each year. Has this amount each year been satisfactory? Does this amount give each university enough to build the priority facilities, or, conversely, is it too much to be used effectively?

Answer: The $10 million has been satisfactory because of the long range planning done at each institution. This funding does provide each university enough support to build priority facilities and the funds are being used effectively. CSRS is working closely with each institution so that the funds are used on priority projects.

Question: Will the $50 million over the 5-year period provide the needed facilities, or is it likely that an extension of this program will be requested?

Answer: The $50 million over the five-year period will provide the most needed research facilities to strengthen the capacity of these institutions to conduct research in the food and agricultural sciences and have a greater impact on future research in the respective States. Since the program began one year later than envisioned when the 1981 Farm Bill was passed, the Department has proposed a one year extension of the authorization level to allow for full funding of the originally planned five-year, $50 million program. Further extension of this program has not been requested by the institutions through the partnership planning process and is not proposed by the Department.

GRADUATE FELLOWSHIP PROGRAM

Question: USDA serves as the lead agency for coordinating Higher Education programs in the Food and Agricultural Sciences. What resources are being committed during the current fiscal year and are projected for FY '86 to further develop a data base to assist this Congress in supporting priority programs for the development of human capital in Agriculture?

Answer: In coordination with the agricultural higher education community a computerized national information system called the Food and Agricultural Education Information System (FAEIS) is being developed. This system when completed will provide information not previously available for administrators and other decision-makers for program planning activities. In Fiscal Year 1985, an allocation of $80,000 is anticipated for this high priority activity; and support will continue in Fiscal Year 1986 within available funds.

Question: A graduate fellowship program was initiated by Congress in 1984 to address the problem of human capital shortages in the Food and Agricultural Sciences. What was the university response to this program and what percentage of those responding to the program were able to be funded?

Answer: The USDA National Needs Graduate Fellowships Grants Program has generated significant interest and requests for information on the part of universities nationwide. Proposals for graduate fellowships grants were submitted by some 73 different institutions. After peer panel review and evaluation 67 proposals were selected for funding (46% of those received). These grants were made to support the recruitment and first year of training of 302 graduate fellows at some 47 institutions in 35 states across the Nation.

The program was developed based on comments received from universities, agriculture industries, and other agricultural higher education participants. University administrators nationwide have attested to the unique ability of the fellowship program to develop needed expertise by targeting specific shortage fields, by attracting outstanding scholars and preparing them to become future scientists, and by providing training for fellows at institutions recognized for academic and research excellence in the targeted national need areas.

Question: In view of the need for this program, why did USDA choose not to include it in their FY '86 budget?

Answer: Due to the need to reduce government spending, funds are not proposed to continue this program in Fiscal Year 1986. Support for the development of agricultural expertise will be provided indirectly through the Competitive Research Grants program and through the provisions of the Hatch Act and related formula funded base programs.

Question: What administrative structure exists within USDA to provide for continued leadership relative to carrying out the function of USDA as the lead federal agency for Higher Education in the Food and Agricultural Sciences?

Answer: The USDA Science and Education Higher Education programs are centered in the Office of Grants and Program Systems (OGPS). Higher Education activities are coordinated with both the land-grant and nonland-grant resident instruction programs in colleges of agriculture, forestry, veterinary medicine, and home economics.

Question: What programs have been initiated by USDA in the past year that have incorporated the input of the private sector in addressing the needs of Higher Education in the Food and Agricultural Sciences?

Answer: A USDA initiated project to critically review curricula in agriculture and natural resources in land-grant and nonland-grant colleges of agriculture recently received considerable industry support. This project is being closely coordinated with university and agricultural industries to the point where some industries have assigned staff to work with the project. Funding efforts for this project have so far resulted in $300,000 in grants from the Exxon Education Foundation; R. J. Reynolds Industries, Inc.; Upjohn Company; and other supporters.

In addition, the first Secretary's Challenge Forum was organized. It was titled "Investing in Brainpower -- Keeping U.S. Agriculture's Competitive Edge." The objective of the forum was to stimulate partnerships between industry, academia, and government aimed at assuring the Nation of highly qualified food and agricultural scientists and experts. Subsequent to this a group called "Forum for Excellence in the Food and Agricultural Sciences" was convened under the leadership of Dr. Dale Wolf from the DuPont de Nemours Co. This group, composed entirely of agricultural industry leaders, is currently considering a variety of activities which industry could undertake to strengthen higher education programs in the food and agricultural sciences.

Question: What programming effort has been initiated by Higher Education, USDA, in conjunction with the National Science Foundation and the Department of Education to facilitate the offering of undergraduate programs in our nation's agricultural colleges?

Answer: Efforts designed to strengthen programs in the food and agricultural sciences in the Nation's colleges of agriculture and natural resources are coordinated closely with efforts underway in the National Science Foundation (NSF) and in the Department of Education (DEd). Prior to institution of the National Needs Graduate Fellowships Grants Program, extensive discussions were held with representatives of both organizations for the purpose of designing guidelines for the fellowship program, to enable USDA to better meet the needs of the higher education community while providing a mechanism to develop critical expertise in key disciplines, where studies indicated a need for additional expertise to meet projected demands. Currently, Dr. Kyle Jane Coulter, Director of Higher Education Programs, OGPS, USDA, serves as Chair of the Federal Education Data Acquisition Council (FEDAC). This is a major Interdepartmental Committee provided for by law, sponsored by the U.S. Department of Education aimed at improving the quality of data collected from educational entities for Federal programs and at the same time reducing as much as practicable the paperwork burden brought about by Federal efforts to collect education related data. Furthermore, an agreement with NSF has recently been successfully negotiated to amend an NSF survey instrument, designed to collect information relative to Federal support for graduate student training, to collect information specific to USDA support. This information, critical to program planning efforts in USDA, would possibly have placed an unreasonable burden on the education community should USDA have been forced to collect this data separate from the NSF.

Question: What are the USDA projections for the number of B.S., M.S., and Ph.D. graduates in the Food and Agricultural Sciences for 1990 as compared to 1984?

Answer: According to the most recent data available, projections on the availability of expertise in the food and agricultural sciences are showing an approximate overall annual shortfall of 15%, with much higher shortages in some specific employment categories. For example, the annual shortage of Administrators/Managers/Financial Advisors runs as high as 30%; for Manufacturing and Processing Scientists and Engineers as high as 18%.

Recent trends show a 32% decline in undergraduate enrollment at land-grant colleges of agriculture from 1977 to 1984 and a 4% decline in graduate enrollment at land-grant colleges of agriculture during this same period. Expectations are that these trends will continue through the remainder of this decade. At this same time, there is expected to be an 8% decline of high school graduates in the 18 to 24 year old age category between 1981 and the year 2000.

Question: I have been told that the stipend for the first year was $15,000 and was reduced to $9,000 for the second year, with no commitment for the third year. Is this true?

Answer: This is true. The stipend paid to doctoral students under the Food and Agricultural Sciences National Needs Graduate Fellowships Grant Program in FY 1984 was set at $15,000; total funds appropriated were $5 million. In FY 1985 total funding of $3 million was appropriated, a 40% decrease in funding. Since sufficient funds were not available to permit maintaining the stipends at the FY 1984 level, the stipends were reduced to $9,000. This permitted continuing support although at a reduced level to the 67 grants awarded in FY 1984. Due to the need to reduce government spending, these funds are not proposed as part of the President's budget for FY 1986. Through the provisions of the Competitive Research Grants program, the Hatch Act, and related formula funded base programs, support will continue to be provided indirectly for the development of agricultural expertise.

Question: Doesn't this cause problems in the program, not only causing hardship for the students, but also by jeopardizing USDA's investment if a student must leave school because of the reduction?

Answer: In some cases this may cause a hardship on individual students. However, universities generally are taking special efforts to alleviate these problems by allocating other available funds or redirecting funds available and taking other steps to raise stipends as much as possible.

Question: Wouldn't it be a better idea if you made a certain, guaranteed commitment for three years rather than to alter the program each year? (OICD scholarship programs are operated that way.)

Answer: Within available funds, the program could be managed in either mode. Certainly, guaranteed funding for three years would be a safe approach. At the time the program was initiated the projected need for human expertise in the food and agricultural sciences was dramatic relative to the projections for the supply of trained professionals and scientists. These projections have not been proven wrong to this point. It was felt that the expertise needs were so great that an effort should be made to attract the largest number of students possible to graduate programs in the food and agricultural sciences.

Question: How much would be required to fund the balance of currently-held fellowships at the level of the first-year commitment? Please include FY 1985 and FY 1986 requirements.

Answer: The FY 1984 funding level was $5 million and $3 million was appropriated in FY 1985. In order to fund the program at the same level, an additional $2 million would be required in FY 1985 and $5 million in FY 1986.

Question: Based on a 3-year commitment to recipients, how many fellowships could be awarded in a $3 million program?

Answer: We would estimate that the program would support approximately 60 doctoral students, assuming that stipends would remain at $15,000. We do have evidence that in some cases these stipends are becoming less competitive with other opportunities available to young scientists entering the shortage fields targeted for support under this program.

QUESTIONS SUBMITTED BY SENATOR CHILES

HIGHER EDUCATION

Question: What are your views regarding the post-graduate fellowship program?

Answer: The USDA Graduate Fellowships Program is effective in attracting talented individuals into fields identified as serious shortage areas of scientific and professional expertise. The Fellowships Program specifically selected targeted specialties based on the most recent supply/demand data available. The following fields were identified for support in this program: biotechnology, agricultural engineering, food and agricultural marketing, and food science/human nutrition. Fellows were awarded in each of these areas as follows: biotechnology, 89 doctoral; agricultural engineering, 23 doctoral and 53 master's; food and agricultural marketing, 66 doctoral; and food science/human nutrition, 20 master's in food science and 51 doctoral in the combined field.

Question: I understand that funding for this program is once again, not being recommended by the administration. Why?

Answer: Due to the need to reduce government spending funds are not proposed to continue this program in fiscal year 1986. Support for the development of agricultural expertise will be provided indirectly through the Competitive Research Grants program and through the provisions of the Hatch Act and related formula base funded programs.

Question: Is this program making a contribution toward insuring an adequate number of agriculture research scientists in the coming years?

Answer: The Graduate Fellowships Program has supported recruitment and graduate training for 302 graduate fellows at some 47 different institutions in 35 states across the Nation. These fellows are pursuing advanced degrees in the following National Need areas: biotechnology (89 fellows), food and agricultural marketing (66 fellows), agricultural engineering (76 fellows), and food science/human nutrition (71 fellows). Disciplines were targeted for the recruitment of fellows on the basis of the most current statistical data on the supply of and demand for graduates in the food and agricultural sciences.

Question: How many scientists are currently being trained under this program?

Answer: Currently, the program is supporting the academic training of 302 graduate-level fellows in four targeted fields--biotechnology, food and agricultural marketing, agricultural engineering, and food science/human nutrition.

Question: How does the proposed 1986 USDA budget address human resource shortages in agricultural engineering, plant and animal molecular genetics, soil and water sciences, food science, human nutrition and agricultural economics?

Answer: The fiscal year 1986 budget proposes a Strengthening Grants Program for 1890 colleges, Tuskegee, and the University of the District of Columbia. These funds are available to be used for a variety of program enhancement purposes, including the recruitment of outstanding students into food and agricultural studies. In addition, it is anticipated that the Competitive Research Grants program, Hatch formula funds and other base funded programs will contribute to the development of agricultural expertise in these areas.

BIOTECHNOLOGY RESEARCH

Question: Biotechnology holds great promise for the future growth and productivity of agriculture. Would you tell me about USDA's program efforts in this area?

Answer: USDA is placing increased emphasis on use of biotechnology tools to solve agricultural and forestry problems and improve productivity. The techniques include plant cell and protoplast culture, plant regeneration, somatic hybridization, embryo transfer, recombinant DNA approaches, including gene identification, characterization, splicing, replication, regulation and transfer.

Question: Would you detail fiscal year 1985 USDA involvement in biotechnology and give me a breakdown regarding manpower and funding?

Answer: The information follows.

Biotechnology Research

	Fiscal Year 1985	
	$ in Millions	SY's
Agricultural Research Service	$26.4	180.0
Cooperative State Research Service	46.1	*
Forest Service	2.6	4.5
USDA Total	75.1	184.5

*Non-Federal, State Agricultural Experiment Stations (SAES) only, 340 SY's, 530 students, 598 staff.

Question: What is being proposed for 1986?

Answer: The information follows.

Biotechnology Research

	Fiscal Year 1986	
	$ in Millions	SY's
Agricultural Research Service	$26.9	180.0
Cooperative State Research Service	42.1	*
Forest Service	0.9	4.5
USDA Total	69.9	184.5

*Non-Federal, SAES only, 373 SY's, 583 students, 650 staff.

The fiscal year 1986 reduction in total funding results primarily from the proposal to terminate funding for the CSRS Special Research Grants program and the Forest Service Competitive Research Grants program.

Question: How much is going for biotechnology research in each fiscal year?

Answer: The information follows.

Biotechnology Research
($ in Millions)

	FY 1984	FY 1985	FY 1986
Agricultural Research Service	$15.4	$26.4	$26.9
Cooperative State Research Service	22.6	46.1	42.1
Forest Service	1.1	2.6	0.9
USDA Total	39.1	75.1	69.9

Question: Are any funds being expended for basic biotechnology risk assessment research?

Answer: The nature of risk assessment is inherent in basic research and is fundamentally a part of the scientific protocol at all times (i.e. what are the consequences of specific types of research?). For example, the incremental process of variety development and release involves an ongoing assessment. Another application of basic research to risk assessment is the development of new types of tools for risk assessment research; e.g. (1) research on methods to detect new agents of disease, such as various virus and virus-like particles in plants, plasmid carrying bacteria, and many other microorganisms; and (2) the development of molecular probes and other sensitive diagnostic tools for detecting specific genes and assessing their persistence and transfer in the environment.

The USDA and the National Association of State Universities and Land-Grant Colleges Division of Agriculture Committee on Biotechnology are in the process of formalizing a national program to assess the biological impact of the release of organisms containing recombinant DNA (r-DNA) for agricultural use. Although the program is not yet official policy, the specific details of the program are under review by the Federal agencies and the research universities. The National Biological Impact Assessment Program (NBIAP) would be organized using the existing nationwide agricultural research network. It would assure the safe release of r-DNA products into the environment through a three-level impact assessment plan using specified criteria and protocols. The program builds on the experience and success of the NIH-RAC and the associated Institutional Biosafety Committee (IBC) system. However, NBIAP would extend oversight of r-DNA research beyond present coverage and would include commercial and non-experimental release of r-DNA products. The proposed program is consistent with the Coordinated Framework for the Regulation of Biotechnology (Federal Register, December 31, 1984) and complements well the existing Federal regulatory authorities.

Question: Do you anticipate future risk assessment research support? How much?

Answer: Inasmuch as we are able to improve the support of biotechnology broadly in this nation, we will be able to improve our research base and thereby contribute to risk assessment research, e.g. such components as gene action and biological stress are a substantial part of risk assessment. The developing National Biological Impact Assessment Program will provide accurate and continuous assessment of the impact of genetically altered organisms produced by biotechnological research.

Question: Can you explain to me the process a company must go through to have an agriculture related biotechnology product approved for commercial distribution?

Answer: The approval processes recognize the need to provide a mechanism that is dependent in part on the nature of the product. Thus, although the general principle and route to follow are maintained, different steps will be taken, for example with an animal biologic to be used in a relatively closed system, than that involving a plant or microbial biologic that might involve several million acres. It is important also to note that when the proper steps are followed the ultimate "use" products, be they veterinary biologics, biological control biologics, higher plant biologics, etc., will not be treated differently whether genetically engineered or otherwise.

The agricultural research community has had a long and very successful history of releasing plants, microbials, and animals into the environment. The success of this process, especially in the last fifty years cannot be overemphasized. Last year alone, over 193 trillion corn plants were released into the agricultural environment without generation per se of untoward biological effects. The success of the process has been due to (1) the use of a high level of expertise based in the USDA and cooperating State agricultural experiment stations, (2) incremental development of releases, and (3) a continuous assessment process.

As described previously, the NASULGC Division of Agriculture Committee on Biotechnology and the USDA are formalizing the National Biological Impact Assessment Program (NBIAP) to expand upon experience cited above and to realize a safe, reliable assessment system that will take into account the criteria required for the approval process.

Consideration for approval of release on a commercial or non-experimental scale assumes that the product has satisfied previously the criteria set forth for laboratory research (presently the National Institute of Health (NIH) Recombinant DNA Advisory Committee (RAC) Guidelines) and for small scale, experimental field testing.

The following sequence is a process proposed for the commercial release of a biotechnological product.

1. Product release request, containing specified information, including results of use under laboratory and specialized containment conditions, prepared by applicant.
2. Release request submitted to appropriate local authority including approval by an expanded local institutional biosafety committee.
3. Release request submitted to the NBIAP Board for evaluation and recommendations to be referred through specific RACs and to other agencies as needed.
4. Applicant notified of NBIAP Board recommendation and appropriate agency decision if applicable.

Question: Is this process significantly different from the approval process a non-agriculture related product would have to navigate in a different agency?

Answer: No, it would not be significantly different. The exception is the non-agricultural products that will always be used in a contained manner. For example, in the case of medicine, clinical trials are like agriculture's field tests. In this case impact on the environment is not an issue.

Question: About how long does it take and how expensive is it for a company to bring a biotech product successfully through USDA's regulatory approval system?

Answer: To date, USDA has not dealt with the commercial release of a biotechnological product with the exception of veterinary biologics. The USDA Agriculture Research Recombinant DNA Committee (ARRC) has worked closely with the NIH RAC in agricultural matters and USDA is currently developing a process to handle commercial and non-experimental applications. Where the impact situation is well established, time and cost are expected to be minimal.

Question: How many manhours and dollars are being expended for biotechnology regulation and oversight by USDA?

Answer: The oversight of biotechnology is not separable from agricultural research and regulation. Rather, it is a normal part of the established process of assessment and management. The regulation of biotechnology is not yet consuming any significant USDA resources due to the few applications and inquiries received.

Question: Would you tell me about USDA's biotechnology regulatory coordination with other federal agencies?

Answer: USDA has collaborated with NIH, EPA, FDA and NSF on biotechnological issues related to agriculture. The twelve member Agriculture Recombinant DNA Research Committee (ARRC) includes representatives from USDA, NIH and NSF and has worked closely with the NIH RAC. Additionally, the USDA has a non-voting representative to the NIH RAC.

Question: What agencies do you regularly deal with in this regard and what products or circumstances most often lead to the necessity of cooperative working agreements?

Answer: The agencies primarily dealt with in a coordinated regulatory mode are NIH, EPA, and FDA. Areas which may overlap include animal biologics, some food additives, biological control agents, certain microbials, and environmental impacts resulting from the release of biological organisms.

Question: Do you feel there exists a need for more cooperation and coordination between the various agencies with regard to the regulation of biotechnology?

Answer: Yes, expanded cooperation and coordination would be beneficial.

Question: What unnecessary regulatory overlap currently exists in your opinion?

Answer: It is believed that existing legislation is sufficient if administered in the manner consistent with previously established USDA policy. There are areas of overlap between USDA and EPA in particular. There are differences of opinion in certain areas regarding the definition of pesticides, chemical substances, and genetic engineering as well as the scope and interpretation of Federal, Insecticide, Fungicide, and Rodenticide Act (FIFRA) and Toxic Substances Control Act (TSCA).

Question: Does the need exist in any situation for more clearly defined regulatory responsibilities among the various agencies?

Answer: The areas noted above will require clarification. This may come about as the National Biological Impact Assessment Program (NBIAP) and the OSTP Proposed Coordinated Framework for Regulation of Biotechnology (December 31, 1984, Federal Register Notice) develop. The OSTP framework and NBIAP will provide a mechanism and a supporting research base to accommodate the oversight demands brought about by the new biotechnologies.

Question: Do you endorse the recommendations of Cabinet Council's Working Group on Biotechnology regarding the proper regulatory framework?

Answer: USDA supports the Coordinated Framework for the Regulation of Biotechnology proposed by the Cabinet Council Working Group on Biotechnology in the December 31, 1984, Federal Register Notice. The proposed system could be strengthened by formally linking the Federal review system with the National Biological Impact Assessment Program for all issues pertaining to agriculture to assure that the best available scientific expertise and resources are accessed in the assessment of the biological impact of biotechnological release.

Question: Some questions have been raised regarding EPA's ability to enforce the current laws regarding biotechnology due to lack of resources and expertise. Do you believe USDA has the proper resources and expertise to adequately deal with existing regulatory requirements?

Answer: Basically the USDA has the resources and expertise. Through expertise available in the USDA and cooperating university scientists, the USDA will be equipped to deal efficiently with the products and processes of biotechnology. This is predicated on the development and implementation of NBIAP. NBIAP takes advantage of the State Agricultural Experiment Station System--the extant agricultural research network of the USDA and the nation. The past 75 years of strength and dependability speak to the success of the agricultural research community's assessment system, and this system will be formalized through the NBIAP.

Question: As a greater number of and more advanced biotechnology products and substances reach the commercial distribution point, will USDA be able to handle these new demands?

Answer: Following the successful model of the NIH Recombinant DNA Advisory Committee and supplementing it with the NBIAP, USDA will have adequate expertise to handle the demands. As described previously, the NBIAP offers a three-level assessment program using specified criteria and protocols to deal with the development, release and commercialization of biotechnological products in the most efficient and prudent manner. Much of the control is envisioned at the local institutional biosafety committee level as knowledge and expertise increase--similar to the early days of the NIH RAC and associated Guidelines for r-DNA research.

Question: Will the department be able to expeditiously move new products through the regulatory process?

Answer: Yes, USDA will be able to do this. The existing network of scientific resources and current regulations can provide necessary oversight.

QUESTIONS SUBMITTED BY SENATOR SASSER

SPECIAL RESEARCH GRANTS

Question: What was appropriated in FY 1984 and FY 1985 for Special Research Grants?

Answer: Funds appropriated for Special Research Grants under Public Law 89-106 were $25,234,000 in fiscal year 1984 and $27,328,000 in fiscal year 1985.

Question: Why was this program chosen for elimination in FY 1986?

Answer: In the spirit of supporting the national effort to control expenditures and reduce the national debt, the administration has placed high priority on maintaining support for the formula base funded programs. Therefore, these base programs have been maintained at level funding. The Hatch Act, McIntire-Stennis Cooperative Forestry, and Evans-Allen program at the 1890 Colleges and Tuskegee Institute are the formula funded base programs that constitute the core of the State/Federal research partnership. When these formula programs are put together with State funding, they provide the basic laboratory facilities, scientists, graduate students, and support necessary for the long term stability of agricultural research. This will continue to allow maximum flexibility at the individual experiment station and college or university level to support research on the highest priority problems and further assure a continued strong working relationship between the USDA and the State agricultural experiment station system. Therefore, as a matter of priority, and keeping in line with overall reductions in Federal spending, no funding has been recommended for the Special Research Grants program.

Question: Provide for the record the list of Special Research Grants which were approved in FY 1984.

Answer: The informati~~on follows.~~

PROGRAM AREA: SOIL EROSION
PUBLIC LAW 89-106--SPECIAL RESEARCH GRANTS PROGRAM
FISCAL YEAR 1984

ORGANIZATION	GRANT NUMBER	PROPOSAL NUMBER	TOTAL	AGREEMENT PERIOD FROM	TO	TITLE
Univ. of Idaho Moscow, Idaho	**83-CRSR-2-2153	**8401755	$199,907**	**06/01/83	**05/31/87	Soil Erosion in the Pacific Northwest (STEEP Program) - Idaho
Oregon State Univ. Corvallis, Oregon	**83-CRSR-2-2223	**8401748	$199,907**	**07/01/83	**06/30/87	Soil Erosion Control in Pacific Northwest (STEEP Program) - Oregon
Washington State Univ. Pullman, Washington	**83-CRSR-2-2313	**8401802	$199,906**	**07/01/83	**06/30/87	Soil Erosion Control in Pacific Northwest (STEEP Program) - Washington
		TOTAL	$599,720			

PROGRAM AREA: DRIED BEAN RESEARCH, NORTH DAKOTA
PUBLIC LAW 89-106--SPECIAL RESEARCH GRANTS PROGRAM
FISCAL YEAR 1984

ORGANIZATION	GRANT NUMBER	PROPOSAL NUMBER	TOTAL	AGREEMENT PERIOD FROM	TO	TITLE
North Dakota State Univ. Fargo, North Dakota	84-CRSR-2-2358	8401035	$24,105	07/01/84	06/30/85	Improvement of Edible Dry Beans
		TOTAL	$24,105			

PROGRAM AREA: FOOD & AGRICULTURAL POLICIES
PUBLIC LAW 89-106--SPECIAL RESEARCH GRANTS PROGRAM
FISCAL YEAR 1984

ORGANIZATION	GRANT NUMBER	PROPOSAL NUMBER	TOTAL	AGREEMENT PERIOD FROM	TO	TITLE
Univ. of Wisconsin Madison, Wisconsin	**83-CRSR-2-2077	**8401040	$150,412**	**06/01/83	**09/30/86	Leadership and Coordination of Regional Research Project NC 117
		TOTAL	$150,412			

**ADMENDMENT

PROGRAM AREA: SOYBEAN RESEARCH
PUBLIC LAW 89-106--SPECIAL RESEARCH GRANTS PROGRAM
FISCAL YEAR 1984

ORGANIZATION	GRANT NUMBER	PROPOSAL NUMBER	TOTAL	AGREEMENT PERIOD FROM	TO	TITLE
Stanford Univ. Stanford, California	84-CRSR-2-2495	8401073	$100,000	09/15/84	09/30/86	Stomatal Regulation in Soybean: Mechanisms and Application to Crop Improvement
Iowa State Univ. of Sci. & Techn. Ames, Iowa	84-CRSR-2-2497	8401104	$55,061	09/01/84	08/31/87	Relation of Isozyme Loci to Qualitative Characters of Soybean
Univ. of Missouri Columbia, Missouri	**83-CRSR-2-2309	**8401053	$94,631	**09/01/83	**08/31/86	Soybean Production and Soil Organic Matter Balance
North Carolina State Univ. Raleigh, North Carolina	84-CRSR-2-2498	8401083	$90,825	08/01/84	07/31/87	Molecular Studies of DNA Changes During Soybean Cotyledon Senescence
Ohio State Univ. Res. Fdn. Columbus, Ohio	84-CRSR-2-2499	8401051	$61,220	08/01/84	07/31/87	Inheritance of Antibiosis Resistance to Mexican Bean Beetle in Soybeans
Washington State Univ. Pullman, Washington	84-CRSR-2-2496	8401081	$97,708	08/15/84	08/31/86	Ureide Metabolism in Mesophyll and Paraveinal Mesophyll Cells of Soybean Leaf
		TOTAL	$499,445			

**AMENDMENT

PROGRAM AREA: INTEGRATED PEST MANGEMENT
PUBLIC LAW 89-106--SPECIAL RESEARCH GRANTS PROGRAM
FISCAL YEAR 1984

ORGANIZATION	GRANT NUMBER	PROPOSAL NUMBER	TOTAL	AGREEMENT PERIOD FROM	TO	TITLE
Univ. of Arkansas Fayetteville, Arkansas	84-CRSR-2-2524	8401841	$373,676	09/15/84	09/30/85	Integrated Pest Management - Southern Region
Colorado State Univ. Ft. Collins, Colorado	84-CRSR-2-2522	8401833	$290,402	09/15/84	09/30/85	Integrated Pest Management for Semiarid Dryland and Irrigated Agroecosystems--Western Region
Univ. of Maine Orono, Maine	84-CRSR-2-2430	8401756	$14,835	06/15/84	11/30/85	Integrated Pest Management - Northeast Region -- Maine
Univ. of Massachusetts Amherst, Massachusetts	84-CRSR-2-2429	8401754	$17,700	06/15/84	06/30/85	Integration of Colorado Potato Beetle Management Strategies
Univ. of Minnesota St. Paul, Minnesota	84-CRSR-2-2515	8401832	$333,843	09/15/84	09/30/85	IPM Research Grants for North Central Experiment Station Region
Rutgers Univ. New Brunswick, New Jersey	84-CRSR-2-2459	8401764	$15,000	08/01/84	07/31/85	Strategies to Enhance Beauveria bassiana Efficacy Against Overwintering Populations of the Colorado Potato Beetle
Cornell Univ. Ithaca, New York	84-CRSR-2-2458	8401763	$112,300	09/15/84	09/30/85	Integrated Pest Management - Northeast Region, New York State
Pennsylvania State Univ. Univ. Park, Pennsylvania	84-CRSR-2-2477	8401777	$51,000	07/15/84	12/31/85	IPM-NE Region, Pennsylvania
Univ. of Rhode Island Kingston, Rhode Island	84-CRSR-2-2460	8401758	$21,000	07/01/84	06/30/85	IPM - Northeast Region - Rhode Island

PROGRAM AREA: INTEGRATED PEST MANGEMENT
PUBLIC LAW 89-106--SPECIAL RESEARCH GRANTS PROGRAM
FISCAL YEAR 1984

ORGANIZATION	GRANT NUMBER	PROPOSAL NUMBER	TOTAL	AGREEMENT PERIOD FROM	TO	TITLE
Texas A&M Research Fdn. College Station, Texas	**82-CRSR-2-1000	**8401026	$1,735,524**	**03/01/82	**02/28/85	The Consortium for Integrated Pest Management
Univ. of Vermont Burlington, Vermont	84-CRSR-2-2476	8401776	$15,000	07/15/84	01/31/86	Integration of a Mycoherbicide Into the Corn-Alfalfa Rotation for the control of Velvetleaf
		TOTAL	$2,980,280			

PROGRAM AREA: PESTICIDE CLEARANCE
PUBLIC LAW 89-106--SPECIAL RESEARCH GRANTS PROGRAM
FISCAL YEAR 1984

ORGANIZATION	GRANT NUMBER	PROPOSAL NUMBER	TOTAL	AGREEMENT PERIOD FROM	TO	TITLE
Univ. of California Davis, California	84-CRSR-2-2341	8401009	$277,684	03/01/84	02/28/85	Minor Use Pesticide Research - Western Region IR-4
Univ. of Florida Gainesville, Florida	84-CRSR-2-2342	8401011	$277,684	02/01/84	01/31/85	Southern Region Leader Laboratory Cooperative Research for Minor Use Pesticides and Biologicals Registrations
Michigan State Univ. East Lansing, Michigan	84-CRSR-2-2346	8401019	$277,684	02/15/84	02/28/85	North Central Leader Laboratory Program for Minor Use Pesticide Research to Supplement the IR-4 Program
Rutgers Univ. New Brunswick, New Jersey	84-CRSR-2-2350	8401031	$277,683	03/01/84	02/28/87	A National Agricultural Program: Clearances of Chemicals and Biologics for Minor or Special Uses/Pesticides
Cornell Univ. Ithaca, New York	**83-CRSR-2-2075	**8401023	$277,684**	**03/01/83	**09/30/85	Northeast Regional Laboratory for Analysis of Pesticides and Biologics for Minor or Special Uses
		TOTAL	$1,388,419			

**AMENDMENT

PROGRAM AREA: MINOR USE ANIMAL DRUGS
PUBLIC LAW 89-106--SPECIAL RESEARCH GRANTS PROGRAM
FISCAL YEAR 1984

ORGANIZATION	GRANT NUMBER	PROPOSAL NUMBER	TOTAL	AGREEMENT PERIOD FROM	AGREEMENT PERIOD TO	TITLE
Univ. of California Davis, California	**82-CRSR-2-1013	**8401012	$46,280**	**05/01/82	**10/31/85	Minor Use Animal Drug Research - Western Region IR-4
Univ. of Florida Gainesville, Florida	**82-CRSR-2-1012	**8401013	$46,280**	**05/01/82	**01/31/85	Southern Region Leader Laboratory Cooperative Research for Minor or Specialty Use Animal Drugs
Michigan State Univ. East Lansing, Michigan	**82-CRSR-2-1014	**8401020	$46,280**	**05/01/82	**04/30/85	North Central Leader Laboratory Program for Minor Use Drug Research to Supplement the IR-4 Program
Rutgers Univ. New Brunswick, New Jersey	84-CRSR-2-2348	8401030	$46,283	03/01/84	02/28/86	Clearances of Chemicals and Biologics for Minor or Special Uses/Animal Drugs
Cornell Univ. Ithaca, New York	**83-CRSR-2-2081	**8401024	$46,280**	**03/01/83	**09/30/85	Northeast Regional Laboratory for Analysis of Animal Drugs for Minor Uses
		TOTAL	$231,403			

**AMENDMENT

PROGRAM AREA: PESTICIDE IMPACT ASSESSMENT·
PUBLIC LAW 89-106--SPECIAL RESEARCH GRANTS PROGRAM
FISCAL YEAR 1984

ORGANIZATION	GRANT NUMBER	PROPOSAL NUMBER	TOTAL	AGREEMENT PERIOD FROM	TO	TITLE
Auburn Univ. Auburn Univ., Alabama	84-CRSR-2-2380	8401717	$8,381	06/01/84	05/31/85	National Agricultural Pesticide Impact Assessment Program
Univ. of Alaska Fairbanks, Alaska	84-CRSR-2-2424	8401714	$5,000	06/15/84	06/30/85	Persistence of Diazinon and Chlorpyrifos and Efficacy Against Delia floralis
Univ. of Arizona Tucson, Arizona	**83-CRSR-2-2113	**8401707	$7,066**	**09/15/83	**09/30/85	Collection and Analysis of Information Relative to the Use of Pesticides
Univ. of Arkansas Fayetteville, Arkansas	**83-CRSR-2-2322	**8401004	$242,500**	**09/15/83	**09/30/84	Southern Region Pesticide Impact Assessment Program
Univ. of Arkansas Fayetteville, Arkansas	**83-CRSR-2-2109	**8401309	$12,860**	**07/01/83	**06/30/85	Participation in the National Agricultural Pesticide Impact Assessment Program
Univ. of Arkansas Fayetteville, Arkansas	**83-CRSR-2-2322	**8401831	$75,500**	**09/15/83	**09/30/85	Southern Region Pesticide Impact Assessment Program
Univ. of California Berkeley, California	**83-CRSR-2-2327	**8401003	$242,500**	**09/15/83	**09/30/85	Western Regional Pesticide Impact Assessment Program
Univ. of California Berkeley, California	**83-CRSR-2-2122	**8401612	$29,215**	**09/15/83	**09/30/86	California Pesticide Impact Assessment Program
Univ. of California Berkeley, California	**83-CRSR-2-2327	**8401168	$73,000**	**09/15/83	**09/30/85	Western Region Pesticide Impact Assessment Program
Colorado State Univ. Ft. Collins, Colorado	**83-CRSR-2-2147	**8401608	$7,044**	**09/15/83	**09/30/85	Colorado Pesticide Research
Univ. of Connecticut Storrs, Connecticut	**83-CRSR-2-2105	**8401715	$5,638**	**09/15/83	**09/30/85	Assessment of Several Herbicides as Alternatives to Paraquat
Univ. of Delaware Newark, Delaware	**83-CRSR-2-2148	**8401648	$5,000**	**07/01/83	**09/30/85	Pesticide Impact Assessment and Data Analysis

ORGANIZATION	GRANT NUMBER	PROPOSAL NUMBER	TOTAL	AGREEMENT PERIOD FROM	TO	TITLE
Univ. of Florida Gainesville, Florida	84-CRSR-2-2388	8401700	$14,540	06/01/84	05/31/85	Managing Root-Knot Disease with a Nonfumigant Nematicide and Biocontrol Agents
Univ. of Georgia Res. Fdn. Athens, Georgia	84-CRSR-2-2511	8401822	$23,500	08/01/84	01/31/86	Stability of Tank Mixes of Pesticides Used to Manage Pests of Apples and Peaches
Univ. of Georgia Athens, Georgia	**83-CRSR-2-2104	**8401718	$15,860**	**09/15/83	**09/30/85	Continuation of Work Pesticide Impact Assessment
Univ. of Guam Mangilao, Guam	84-CRSR-2-2373	8401722	$5,000	05/01/84	04/30/85	Effectiveness of Insecticides Against Thrips Attacking Cucurbits
Univ. of Hawaii--Manoa Honolulu, Hawaii	**83-CRSR-2-2111	**8401712	$5,645**	**05/01/83	**04/30/85	Pesticide Impact Assessment and Data Analysis
Univ. of Idaho Moscow, Idaho	**83-CRSR-2-2097	**8401308	$7,367**	**07/01/83	**09/30/85	Idaho's Pesticide Impact Assessment Program
Univ. of Illinois Urbana, Illinois	84-CRSR-2-2381	8401716	$22,413	06/15/84	06/30/86	Pesticide Impact Assessment Research and Data Analysis
Purdue Univ. West Lafayette, Indiana	84-CRSR-2-2382	8401711	$12,771	06/01/84	05/31/85	Pesticide Use Under National Pesticide Impact Assessment Program
Iowa State Univ. of Science & Technology Ames, Iowa	**83-CRSR-2-2099	**8401311	$21,787**	**04/01/83	**03/31/85	Iowa's Contribution, National Agricultural Pesticide Impact Assessment Program
Kansas State Univ. Manhattan, Kansas	**83-CRSR-2-2119	**8401691	$11,216**	**09/15/83	**09/30/85	Mechanisms for the Differential Sensitivity of Plants to Juglone
Univ. of Kentucky Lexington, Kentucky	**83-CRSR-2-2084	**8401154	$6,824**	**04/15/83	**04/30/85	Pesticide Impact Research and Data Analysis
Louisiana State Univ. & A&M College Baton Rouge, Louisiana	84-CRSR-2-2355	8401093	$9,533	09/01/84	08/31/85	Pesticide Impact Assessment Research and Data Analysis

ORGANIZATION	GRANT NUMBER	PROPOSAL NUMBER	TOTAL	AGREEMENT PERIOD FROM	TO	TITLE
Univ. of Maine Orono, Maine	**83-CRSR-2-2091	**8401713	$5,785**	**04/01/83	**09/30/85	Integrated Colorado Potato Beetle Control/Benomyl- and Dodine-Resistance
Univ. of Maryland College Park, Maryland	**80-CRSR-2-0647	**8401005	$24,216**	**09/29/80	**12/31/84	Assistance in the National Agricultural Pesticide Impact Assessment Program
Univ. of Maryland College Park, Maryland	**83-CRSR-2-2222	**8401724	$5,799**	**09/15/83	**09/30/85	Participation in the National Pesticide Impact Assessment Program (NAPIAP)
Univ. of Massachusetts Amherst, Massachusetts	**83-CRSR-2-2132	**8401729	$5,257**	**07/01/83	**06/30/85	Antifeedant Activity of Insecticides to the Colorado Potato Beetle
Michigan State Univ. East Lansing, Michigan	**83-CRSR-2-2112	**8401706	$10,075**	**09/01/83	**08/31/85	Pesticide Impact Assessment Program
Univ. of Minnesota St. Paul, Minnesota	**83-CRSR-2-2095	**8401607	$15,140**	**09/15/83	**09/30/85	Minnesota Pesticide Impact Assessment Program
Mississippi State Univ. Mississippi State, Mississippi	**83-CRSR-2-2108	**8401622	$12,577**	**05/01/83	**04/30/85	Pesticide Impact Assessment on Pre-RPAR and RPAR Candidates in Mississippi
Univ. of Missouri Columbia, Missouri	**83-CRSR-2-2106	**8401688	$11,573**	**06/01/83	**05/31/86	Pesticide Impact Assessment Research and Data Analysis
Montana State Univ. Bozeman, Montana	84-CRSR-2-2359	8401094	$6,422	09/01/84	08/31/85	Montana Pesticide Impact Assessment Program
Univ. of Nebraska Lincoln, Nebraska	84-CRSR-2-2364	8401313	$14,787	04/15/84	09/30/85	Participation in the National Agricultural Pesticide Impact Assessment Program
Univ. of Nevada Reno, Nevada	84-CRSR-2-2426	8401760	$5,000	06/01/84	05/31/85	Evaluation of Data on RPAR and and Pre-RPAR Pesticides Essential to Nevada Agriculture
Univ. of New Hampshire Durham, New Hampshire	**83-CRSR-2-2146	**8401116	$5,000**	**09/15/83	**09/30/85	Pesticide Impact Assessment Research and Data Analysis

ORGANIZATION	GRANT NUMBER	PROPOSAL NUMBER	TOTAL	AGREEMENT PERIOD FROM	AGREEMENT PERIOD TO	TITLE
Rutgers Univ. New Brunswick, New Jersey	**83-CRSR-2-2121	**8401701	$6,257**	**09/15/83	**09/30/85	Evaluation of Soil Insecticide Treatments and Their Impact on Yield of Field Corn in New Jersey
New Mexico State Univ. Las Cruces, New Mexico	**83-CRSR-2-2096	**8401631	$5,320**	**09/15/83	**09/30/85	Pesticide Impact Assessment Research and Data Analysis in New Mexico
Cornell Univ. Ithaca, New York	**83-CRSR-2-2120	**8401705	$10,915**	**09/15/83	**09/30/85	Pesticide-Pest Impact Assessment
North Carolina State Univ. Raleigh, North Carolina	**83-CRSR-2-2098	**8401689	$13,025**	**09/15/83	**09/30/85	Pesticide Impact Assessment Research and Data Analysis
North Carolina State Univ. Raleigh, North Carolina	**83-CRSR-2-2098	**8401829	$23,500**	**09/15/83	**02/28/86	Pesticide Impact Assessment Research and Data Analysis
North Dakota State Univ. Fargo, North Dakota	**83-CRSR-2-2115	**8401735	$7,774**	**04/01/83	**03/31/86	Losses from Pests and Additives with Pesticides
Ohio Agric. Research & Dev. Center Wooster, Ohio	84-CRSR-2-2374	8401632	$13,159	06/01/84	09/30/85	Ohio Program for National Pesticide Impact Assessment Program
Ohio State Univ. (OARDC) Wooster, Ohio	**83-CRSR-2-2326	**8401006	$242,500**	**09/15/83	**09/30/85	North Central Region Special Studies Program for Pesticide Impact Assessment
Ohio State Univ. Wooster, Ohio	**83-CRSR-2-2326	**8401006-1	$75,500**	**09/15/83	**09/30/85	North Central Region Special Studies Program for Pesticide Impact Assessment
Ohio State Univ. Wooster, Ohio	**83-CRSR-2-2326	**8401006-2	$47,500**	**09/15/83	**09/30/85	North Central Region Special Studies Program for Pesticide Impact Assessment
Oklahoma State Univ. Stillwater, Oklahoma	84-CRSR-2-2372	8401617	$8,595	05/15/84	05/31/85	Continued Participation in the National Agricultural Pesticide Impact Assessment Program
Oregon State Univ. Corvallis, Oregon	84-CRSR-2-2484	8401761	$49,170	09/15/84	03/31/86	Oregon Toxicology Information Center (ORTIC)

ORGANIZATION	GRANT NUMBER	PROPOSAL NUMBER	TOTAL	AGREEMENT PERIOD FROM	TO	TITLE
Oregon State Univ. Corvallis, Oregon	**83-CRSR-2-2107	**8401719	$7,356**	**09/15/83	**09/30/85	Oregon Pesticide Impact Assessment Program
Pennsylvania State Univ. Univ. Park, Pennsylvania	**82-CRSR-2-2057	**8401002	$242,500**	**09/30/82	**09/30/86	Continued Implementation of the Northeastern Region Pesticide Impact Assessment Program
Pennsylvania State Univ. Univ. Park, Pennsylvania	**82-CRSR-2-2057	**8401029	$73,000**	**09/30/82	**09/30/86	Continued Implementation of the Northeastern Region Pesticide Impact Assessment Program
Pennsylvania State Univ. Univ. Park, Pennsylvania	**83-CRSR-2-2093	**8401702	$8,432**	**04/01/83	**09/30/85	Pennsylvania Participation in National Pesticide Impact Assessment Program
Pennsylvania State Univ. Univ. Park, Pennsylvania	**82-CRSR-2-2057	**8401824	$60,003**	**09/30/82	**09/30/86	Continued Implementation of the Northeastern Region Pesticide Impact Assessment Program
Univ. of Puerto Rico Rio Piedras, Puerto Rico	84-CRSR-2-2383	8401709	$5,320	09/15/84	09/30/85	Pesticide Impact Assessment Research and Data Analysis
Univ. of Rhode Island Kingston, Rhode Island	**83-CRSR-2-2116	**8401708	$5,000**	**05/01/83	**04/30/85	Herbicide Losses from Turfgrass Management Systems
Clemson Univ. Clemson, South Carolina	**83-CRSR-2-2114	**8401721	$8,489**	**09/15/83	**09/30/85	South Carolina Participation in National Agricultural Pesticide Impact Assessment
South Dakota State Univ. Brookings, South Dakota	**83-CRSR-2-2118	**8401703	$7,203**	**05/01/83	**04/30/85	SDAES Participation in NAPIAP
Univ. of Tennessee Knoxville, Tennessee	**83-CRSR-2-2094	**8401638	$8,142**	**09/15/83	**09/30/85	Pesticide Impact Assessment Research and Data Analysis
Texas A&M Univ. College Station, Texas	**83-CRSR-2-2318	**8401180	$19,451**	**09/15/83	**11/30/85	Benefit and Uses of Pesticides in Texas
Utah State Univ. Logan, Utah	**83-CRSR-2-2117	**8401621	$5,030**	**05/01/83	**04/30/85	Utah Participation, National Agricultural Pesticide Impact Assessment Program (NAPIAP)

ORGANIZATION	GRANT NUMBER	PROPOSAL NUMBER	TOTAL	AGREEMENT PERIOD FROM	AGREEMENT PERIOD TO	TITLE
Univ. of Vermont & State Agric. College Burlington, Vermont	**83-CRSR-2-2092	**8401710	$5,000**	**04/01/83	**08/31/85	Efficacy and Interactions of Herbicides with Biological Control Agents for Control of Velvetleaf
College of the Virgin Islands Kingshill, St. Croix Virgin Islands	**83-CRSR-2-2145	**8401759	$5,000**	**07/01/83	**06/30/85	Virgin Islands National Agricultural Pesticide Impact Assessment Program - 1984
Virginia Polytechnic Inst. & State Univ. Blacksburg Virginia	84-CRSR-2-2371	8401611	$8,518	05/15/84	05/30/85	Virginia's Contribution to National Pesticide Impact Assessment (NAPIAP)
Washington State Univ. Pullman Washington	**83-CRSR-2-2085	**8401704	$9,948**	**04/01/83	**03/31/85	Benefit Assessment of Pesticides in Washington State
West Virginia Univ. Morgantown West Virginia	**82-CRSR-2-1019	**8401690	$5,000**	**05/15/82	**09/30/85	Pesticide Impact Assessment Research, Data Collection and Analysis
Univ. of Wisconsin Madison Wisconsin	**83-CRSR-2-2110	**8401723	$11,491**	**09/15/83	**09/30/85	Pesticide Impacts in Wisconsin
Univ. of Wyoming Laramie Wyoming	84-CRSR-2-2356	8401065	$5,000	05/01/84	06/30/85	Continued Participation in the National Agricultural Pesticide Impact Assessment Program
		TOTAL	$1,994,889			

**AMENDMENT

PROGRAM AREA: RURAL DEVELOPMENT CENTERS
PUBLIC LAW 89-106--SPECIAL RESEARCH GRANTS PROGRAM
FISCAL YEAR 1984

ORGANIZATION	GRANT NUMBER	PROPOSAL NUMBER	TOTAL	AGREEMENT PERIOD FROM	TO	TITLE
Iowa State Univ. Ames, Iowa	84-CRSR-2-2512	8401819	$74,965	09/01/84	11/30/86	North Central Regional Center for Rural Development
Mississippi State Univ. Mississippi State, Mississippi	84-CRSR-2-2500	8401747	$77,750	07/01/84	06/30/86	Southern Rural Development Center
Cornell Univ. Ithaca, New York	84-CRSR-2-2523	8401812	$72,180	09/15/84	09/30/85	Northeast Regional Center for Rural Development
Oregon State Univ. Corvallis, Oregon	**83-CRSR-2-2078	**8401818	$74,965**	**02/01/83	**09/30/85	Western Rural Development Center

TOTAL $299,860

PROGRAM AREA: SOYBEAN CYST NEMATODE IN MISSOURI
PUBLIC LAW 89-106--SPECIAL RESEARCH GRANTS PROGRAM
FISCAL YEAR 1984

ORGANIZATION	GRANT NUMBER	PROPOSAL NUMBER	TOTAL	AGREEMENT PERIOD FROM	TO	TITLE
Univ. of Missouri Columbia, Missouri	84-CRSR-2-2375	8401726	$289,254	06/01/84	05/31/87	Population Dynamics in Heterodera glycines and Its Effects on Soybean Yields

TOTAL $289,254

PROGRAM AREA: BEET & BEAN RESEARCH IN MICHIGAN
PUBLIC LAW 89-106--SPECIAL RESEARCH GRANTS PROGRAM
FISCAL YEAR 1984

ORGANIZATION	GRANT NUMBER	PROPOSAL NUMBER	TOTAL	AGREEMENT PERIOD FROM	TO	TITLE
Michigan State Univ. East Lansing, Michigan	**83-CRSR-2-2311	**8401044	$93,526**	**08/01/83	**07/31/85	Carbon and Nitrogen Utilization by Stressed Varieties of Drybeans and Sugarbeets

TOTAL $93,526

**AMENDMENT

PROGRAM AREA: ANIMAL HEALTH RESEARCH
PUBLIC LAW 89-106—SPECIAL RESEARCH GRANTS PROGRAM
FISCAL YEAR 1984

ORGANIZATION	GRANT NUMBER	PROPOSAL NUMBER	TOTAL	AGREEMENT PERIOD FROM	AGREEMENT PERIOD TO	TITLE
Auburn Univ. Auburn Univ., Alabama	84-CRSR-2-2437	8401214	$89,256	08/01/84	07/31/87	Test for Detection of *Mycoplasma gallisepticum* and *M. synoviae* Infection in Chickens
Auburn Univ. Auburn Univ., Alabama	84-CRSR-2-2494	8401223	$58,099	09/15/84	09/30/86	Latency and Diagnosis of Channel Catfish Virus in Channel Catfish
Auburn Univ. Auburn Univ., Alabama	84-CRSR-2-2472	8401333	$74,423	08/01/84	07/31/87	Chemical Basis for Virulence Among *Fusobacterium necrophorum* Biotypes A, AB, and B
Univ. of Alabama Birmingham, Alabama	84-CRSR-2-2453	8401599	$122,000	09/15/84	09/30/86	Diagnosis of Bluetongue Disease in Sheep and Characterization of Viral Antigenic Site
Univ. of Arizona Tucson, Arizona	84-CRSR-2-2418	8401493	$139,728	08/01/84	07/31/87	Development of Immunity to Swine Dysentery in Pigs
Univ. of California Davis, California	84-CRSR-2-2407	8401159	$102,449	07/01/84	06/30/86	The Role of Immunoglobulin E in Bovine Respiratory Disease
Univ. of California Davis, California	84-CRSR-2-2428	8401151	$132,820	07/01/84	06/30/86	Virulence Determinants in *Pasteurella multocida* in Avian Origin
Univ. of California Davis, California	84-CRSR-2-2414	8401398	$50,444	09/01/84	08/31/85	Immunologic and Toxic Properties of *Pasteurella haemolytica* Endotoxin in Bovine Pneumonia
Colorado State Univ. Ft. Collins, Colorado	84-CRSR-2-2466	8401422	$117,132	09/15/84	09/30/87	Factors Regulating LH Synthesis in the Postpartum Beef Cow

ORGANIZATION	GRANT NUMBER	PROPOSAL NUMBER	TOTAL	AGREEMENT PERIOD FROM	TO	TITLE
Colorado State Univ. Ft. Collins, Colorado	84-CRSR-2-2473	8401492	$126,057	09/01/84	08/31/86	Serodiagnosis of Paratuberculosis Based on Specific Glycolipid Antigens
Colorado State Univ. Ft. Collins, Colorado	84-CRSR-2-2431	8401522	$101,103	08/01/84	07/31/86	Pox Virus as a Cloning Vector for Immunization Against Bovine Herpes Virus I
Colorado State Univ. Ft. Collins, Colorado	84-CRSR-2-2463	8401572	$74,852	08/01/84	07/31/86	Interferon Production and Response in Preimplantation Bovine Embryos
Univ. of Connecticut Storrs, Connecticut	84-CRSR-2-2502	8401488	$117,186	07/01/84	06/30/86	Immunoregulatory Role of Lymphocyte Subsets in Resistance to Bovine Mastitis
Univ. of Delaware Newark, Delaware	84-CRSR-2-2438	8401219	$59,412	07/15/84	07/31/87	Development of Avian Infectious Bronchitis Virus Temperature-Sensitive Mutants
Univ. of Florida Gainesville, Florida	84-CRSR-2-2419	8401418	$123,784	09/15/84	03/31/88	Reducing Embryonic Mortality Associated with Heat Stress and Repeat Breeding
Univ. of Florida Gainesville, Florida	84-CRSR-2-2415	8401459	$149,337	07/01/84	06/30/87	Recombinant Interferons and Macrophage-mediated Defense of the Bovine Lung
Univ. of Georgia Res. Fdn. Athens, Georgia	84-CRSR-2-2433	8401136	$94,911	07/15/84	07/31/87	Pathogenesis of Porcine Hemophilus Pleuropneumonia
Univ. of Idaho Moscow, Idaho	84-CRSR-2-2450	8401580	$121,000	07/01/84	06/30/87	Diagnosis of Chlamydial Infections in Sheep with Monoclonal Antibodies
Purdue Res. Fdn. West Lafayette, Indiana	84-CRSR-2-2420	8401137	$104,039	09/15/84	09/30/87	Endocrine Mechanisms Contributing to Non-detected Estrus in Postpartum Dairy Cows

ORGANIZATION	GRANT NUMBER	PROPOSAL NUMBER	TOTAL	AGREEMENT PERIOD FROM	TO	TITLE
Purdue Research Fdn. West Lafayette, Indiana	84-CRSR-2-2505	8401177	$53,000	09/15/84	09/30/86	Cytogenetic Consequences of Heat Stress in Male Swine
Iowa State Univ. of Science & Technology Ames, Iowa	84-CRSR-2-2448	8401549	$43,615	07/15/84	07/31/86	Relationship of Mycotoxins to Swine Reproductive Failure
Iowa State Univ. of Science & Technology Ames, Iowa	84-CRSR-2-2501	8401550	$100,000	09/01/84	08/31/86	Virus and Cryptosporidium as Causes of Diarrhea in Newborn Calves
Iowa State Univ. of Science & Technology Ames, Iowa	84-CRSR-2-2449	8401553	$70,870	09/15/84	09/30/87	Role of Serum Complement in Pathogenesis of E. coli Infection of Turkeys
Iowa State Univ. of Science & Technology Ames, Iowa	84-CRSR-2-2493	8401587	$47,869	08/01/84	07/31/85	Detoxification of Trichothecene Mycotoxins for Swine
Univ. of Iowa Iowa City, Iowa	84-CRSR-2-2455	8401424	$128,419	09/01/84	08/31/87	Studies on Selected Swine Immunoglobulin Isotypes, Subisotypes, and Idiotypes
Kansas State Univ. Manhattan, Kansas	84-CRSR-2-2411	8401192	$150,000	07/01/84	06/30/87	Interleukin Regulation in Stressed Feeder Calves
Kansas State Univ. Manhattan, Kansas	84-CRSR-2-2417	8401346	$51,634	08/01/84	07/31/86	Role and Identification of Ovipositional Attractants for the Stable Fly in Aged Manure
Univ. of Kentucky Lexington, Kentucky	84-CRSR-2-2492	8401548	$85,014	08/01/84	07/31/88	Importance and Prevalence of Non-Staphylococcus aureus Species Associated with Mastitis

ORGANIZATION	GRANT NUMBER	PROPOSAL NUMBER	TOTAL	AGREEMENT PERIOD FROM	TO	TITLE
Louisiana State Univ. & A&M College Baton Rouge, Louisiana	84-CRSR-2-2444	8401431	$70,548	09/15/84	09/30/86	Cattle Liver Flukes: Effect of Climate on Disease Risk and Control
Louisiana State Univ. & A&M College Baton Rouge, Louisiana	84-CRSR-2-2445	8401434	$133,666	08/01/84	07/31/87	New Methods for Detecting Bovine Chlamydial Infections
Louisiana State Univ. & A&M College Baton Rouge, Louisiana	84-CRSR-2-2446	8401481	$104,881	07/01/84	06/30/87	Control of Gastrointestinal Nematodes of Cattle by Management Practices
Univ. of Massachusetts Amherst, Massachusetts	84-CRSR-2-2513	8401379	$100,000	09/01/84	08/31/86	Reagent/Methods/Characterization of Immune Response to Bovine Mastitis
Michigan State Univ. East Lansing, Michigan	**82-CRSR-2-1083	**8401387	$144,666**	**08/15/82	**08/31/86	Biotechnology and Proteins in Marek's Disease, Immunosuppression and Protection
Univ. of Minnesota St. Paul, Minnesota	84-CRSR-2-2439	8401241	$145,077	09/15/84	09/30/87	Disease and Management Factors Associated with Litter Size and Sow Culling
Univ. of Minnesota St. Paul, Minnesota	84-CRSR-2-2452	8401460	$120,000	07/01/84	06/30/87	Pasteurella multocida Exotoxin: Characterization and Role in Swine Pneumonia
Univ. of Mississippi Med. Center Jackson, Mississippi	84-CRSR-2-2403	8401664	$48,846*	09/15/84	09/30/86	Immunodiagnostic and Preventive Procedures with Channel Catfish
Mississippi State Univ. Mississippi State, Mississippi	84-CRSR-2-2435	8401159	$148,516	09/01/84	08/31/87	The Secretory Cell in the Genesis of the Immune Response
Univ. of Missouri Columbia, Missouri	84-CRSR-2-2422	8401352	$119,982	09/15/84	09/30/86	Relationship of Anestrus to Subnormal Luteal Function in Cattle

*$31,154 also provided under Aquaculture Research program area. This grant was awarded in the amount of $80,000.

ORGANIZATION	GRANT NUMBER	PROPOSAL NUMBER	TOTAL	AGREEMENT PERIOD FROM	TO	TITLE
Univ. of Nebraska Lincoln, Nebraska	84-CRSR-2-2504	8401510	$103,000	09/01/84	08/31/86	Immunoperoxidase and Monoclonal Antibodies: Diagnosis of Bluetongue Virus-Induced Fetal Disease
Cornell Univ. Ithaca, New York	84-CRSR-2-2432	8401118	$148,087	07/15/84	07/31/87	Bovine Intestinal Immunity: Antigen Uptake by Epithelium of Peyer's Patches
Cornell Univ. Ithaca, New York	84-CRSR-2-2440	8401243	$79,000	07/15/84	07/31/87	Evaluation of a Staphylococcus aureus Vaccine for Bovine Mastitis
Cornell Univ. Ithaca, New York	84-CRSR-2-2441	8401245	$48,203	09/01/84	08/31/85	Cloning the Gene for the Toxin of Edema Disease of Swine
Cornell Univ. Ithaca, New York	84-CRSR-2-2509	8401450	$60,000	08/15/84	08/31/86	Biomechanics of Dairy Cow's Teat Related to Mastitis and Machine Milking
North Carolina State Univ. Raleigh, North Carolina	84-CRSR-2-2416	8401438	$50,658	07/01/84	06/30/86	Seasonal Postweaning Anestrus: Hypothalamic and Pituitary Function of the Anestrous Sow
Ohio State Univ. Res. Fdn. Columbus, Ohio	84-CRSR-2-2427	8401127	$117,898	09/15/84	09/30/87	Characterization and Epizootiology of Serotype II Infectious Bursal Disease Virus
Ohio State Univ. Res. Fdn. Columbus, Ohio	84-CRSR-2-2436	8401187	$90,741	09/15/84	09/30/87	Enteritis in Turkey Poults: The Role of Rotaviruses and Rotavirus-like Viruses
Univ. of Tennessee Knoxville, Tennessee	84-CRSR-2-2409	8401337	$149,817	09/15/84	09/30/87	Antibody Response in the Bovine Lower Respiratory Tract to Inhaled Pasteurella hemolytica

ORGANIZATION	GRANT NUMBER	PROPOSAL NUMBER	TOTAL	AGREEMENT PERIOD		TITLE
				FROM	TO	
Univ. of Tennessee Knoxville, Tennessee	84-CRSR-2-2456	8401456	$148,201	09/15/84	09/30/87	An Infected Cell Membrane Protein as a Cross Protective Vaccine for Alphaviruses
Texas A&M Res. Fdn. College Station, Texas	84-CRSR-2-2434	8401156	$94,482	09/01/84	08/31/87	Mechanistic Studies of Ochratoxin A and Citrinin Induced Nephropathy in Swine
Texas A&M Research Fdn. College Station, Texas	84-CRSR-2-2503	8401208	$149,467	09/01/84	08/31/87	Cloning and Expression of Protective Immunogen Genes of *Brucella abortus*
Virginia Polytechnic Inst. & State Univ. Blacksburg, Virginia	84-CRSR-2-2425	8401249	$101,439	07/01/84	06/30/87	Biological Enhancement of Resistance to Enteric and Respiratory Diseases in Piglets
Virginia Polytechnic Inst. & State Univ. Blacksburg, Virginia	84-CRSR-2-2421	8401359	$100,000	09/15/84	09/30/86	*Brucella abortus* Antigen Expression: Understanding and Applications
Washington State Univ. Pullman, Washington	84-CRSR-2-2514	8401363	$96,186	09/01/84	02/28/86	A Vaccinia Virus Recombinant Amplification System for Bovine Viral Subunit Vaccines
Washington State Univ. Pullman, Washington	84-CRSR-2-2423	8401319	$149,677	09/15/84	09/30/87	Reproductive Infections with *Haemophilus somnus*: Diagnosis and Immunity
Washington State Univ. Pullman, Washington	84-CRSR-2-2442	8401320	$77,145	07/15/84	07/31/86	Development of Diagnostic Reagents for Sheep and Goat Retroviruses
Washington State Univ. Pullman, Washington	84-CRSR-2-2408	8401322	$149,145	09/15/84	09/30/86	Mechanisms of Virus-induced Suppression of Bovine Lung Mucosal Defense

ORGANIZATION	GRANT NUMBER	PROPOSAL NUMBER	TOTAL	AGREEMENT PERIOD FROM	TO	TITLE
Washington State Univ. Pullman, Washington	84-CRSR-2-2443	8401380	$64,999	07/15/84	07/31/86	Protection Against Equine Infectious Anemia by Immunization with a Synthetic Peptide
Washington State Univ. Pullman, Washington	84-CRSR-2-2406	8401519	$149,939	09/01/84	08/31/87	Molecular Cloning of the cDNA Gene for Bovine Interleukin-2
Washington State Univ. Pullman, Washington	84-CRSR-2-2457	8401526	$98,851	09/01/84	08/31/86	Production of Protective Monoclonal Antibodies in Pigs by Transfection with DNA
Washington State Univ. Pullman, Washington	**82-CRSR-2-2034	**8401389	$112,494	**09/01/82	**08/31/86	Isolation and Cloning of Protective Juvenile *Fasciola hepatica* Surface Antigens
Univ. of Wisconsin Madison, Wisconsin	84-CRSR-2-2447	8401487	$47,908	09/15/84	09/30/86	Rapid Detection of *Mycobacterium paratuberculosis* Using Radiometric Techniques
Univ. of Wisconsin Madison, Wisconsin	84-CRSR-2-2474	8401496	$50,000	09/01/84	08/31/86	Vesicular Stomatitis Virus: A Molecular Biological Study of the 1982-83 Epizootic
Univ. of Wisconsin Madison, Wisconsin	84-CRSR-2-2451	8401497	$98,905	09/15/84	09/30/86	Evaluation of the Bovine Reproductive Tract by Real-Time Ultrasound
Univ. of Wisconsin Madison, Wisconsin	84-CRSR-2-2413	8401530	$150,000	09/15/84	09/30/86	T-lymphocytes Function Against IBR Virus
Univ. of Wisconsin Madison, Wisconsin	84-CRSR-2-2412	8401538	$139,647	09/15/84	09/30/87	Bovine Phagocyte Interaction with IBR Virus, *Pasteurella*, and *Haemophilus*

ORGANIZATION	GRANT NUMBER	PROPOSAL NUMBER	TOTAL	AGREEMENT PERIOD FROM	TO	TITLE
Univ. of Wisconsin Madison, Wisconsin	84-CRSR-2-2467	8401584	$99,148	09/15/84	09/30/87	Effects of Feeding Aflatoxins to Sows on Disease Susceptibility in Young Pigs
Univ. of Wisconsin Madison, Wisconsin	84-CRSR-2-2410	8401602	$150,000	07/01/84	06/30/87	Potential for Vaccine-Induced Antigenic Variation in Bovid Herpesvirus 1
		TOTAL	$6,899,672			

PROGRAM AREA: AQUACULTURE RESEARCH AT STONEVILLE, MISSISSIPPI
PUBLIC LAW 89-106--SPECIAL RESEARCH GRANTS PROGRAM
FISCAL YEAR 1984

ORGANIZATION	GRANT NUMBER	PROPOSAL NUMBER	TOTAL	AGREEMENT PERIOD FROM	TO	TITLE
Mississippi State Univ. Mississippi State, Mississippi	84-CRSR-2-2363	8401639	$260,329	04/15/84	06/30/86	Evaluation of Alternative Aeration Systems for Commercial Pond Culture of Channel Catfish
		TOTAL	$260,329			

PROGRAM AREA: DAIRY PHOTOPERIOD RESEARCH, MICHIGAN
PUBLIC LAW 89-106--SPECIAL RESEARCH GRANTS PROGRAM
FISCAL YEAR 1984

ORGANIZATION	GRANT NUMBER	PROPOSAL NUMBER	TOTAL	AGREEMENT PERIOD FROM	TO	TITLE
Michigan State Univ. East Lansing, Michigan	84-CRSR-2-2340	8401010	$33,746	06/01/84	11/30/85	Photoperiod-Induced Changes in Growth and Carcass Composition of Steers
		TOTAL	$33,746			

PROGRAM AREA: BEAN FLOUR RESEARCH AT TEXAS & MICHIGAN
PUBLIC LAW 89-106--SPECIAL RESEARCH GRANTS PROGRAM
FISCAL YEAR 1984

ORGANIZATION	GRANT NUMBER	PROPOSAL NUMBER	TOTAL	AGREEMENT PERIOD FROM	TO	TITLE
Michigan State Univ. East Lansing, Michigan	**83-CRSR-2-2130	**8401654	$46,281**	**05/15/83	**04/30/86	Utilization and Market Development of Dry Heated Edible Bean Flours
Texas A&M Univ. College Station, Texas	**83-CRSR-2-2129	**8401038	$30,854**	**05/15/83	**12/31/85	Process Optimization and Expansion of Dry Roasted Bean Products
		TOTAL	$77,135			

**AMENDMENT

PROGRAM AREA: AQUACULTURE RESEARCH
PUBLIC LAW 89-106--SPECIAL RESEARCH GRANTS PROGRAM
FISCAL YEAR 1984

ORGANIZATION	GRANT NUMBER	PROPOSAL NUMBER	TOTAL	AGREEMENT PERIOD FROM	TO	TITLE
Univ. of California Davis, California	84-CRSR-2-2402	8401669	$78,540	09/01/84	08/31/87	Age at Sexual Maturity and Growth Rate of Rainbow Trout
Univ. of Georgia Res. Fdn. Athens, Georgia	84-CRSR-2-2401	8401155	$78,975	07/01/84	06/30/86	Pathogenesis Mechanisms of Edwardsiella ictaluri
Louisiana State Univ. Baton Rouge, Louisiana	84-CRSR-2-2405	8401644	$67,092	09/15/84	09/30/86	A Practical Scheme for the Farming of Prawns in the Southeastern United States
Louisiana State Univ. Baton Rouge, Louisiana	84-CRSR-2-2475	8401682	$69,104	09/01/84	08/31/87	Virulence Factors of Aeromonas hydrophita: Their Role in Pathogenicity and Potential as Immunogens
Univ. of Mississippi Med. Center Jackson, Mississippi	84-CRSR-2-2403*	8401664*	$31,154	09/15/84*	09/30/86*	Immunodiagnostic and Preventive Procedures with Channel Catfish
Univ. of Mississippi University, Mississippi	84-CRSR-2-2404	8401627	$56,806	08/15/84	08/31/86	Genetic Variability Among Stocks of Red Swamp Crawfish, Procambarus clarkii
Texas A&M Res. Fdn. College Station, Texas	84-CRSR-2-2464	8401640	$41,675	09/01/84	08/31/85	Improvement in the Texture and Flavor of Freshwater Shrimp (Macrobrachium rosenbergii)
Washington State Univ. Pullman, Washington	**82-CRSR-2-1058	**8401636	$76,099**	**09/15/82	**08/31/86	Applications of All-Paternal Inheritance in Rainbow Trout
		TOTAL	$ 499,445			

PROGRAM AREA: GERMPLASM RESOURCES RESEARCH
PUBLIC LAW 89-106--SPECIAL RESEARCH GRANTS PROGRAM
FISCAL YEAR 1984

ORGANIZATION	GRANT NUMBER	PROPOSAL NUMBER	TOTAL	AGREEMENT PERIOD FROM	TO	TITLE
Univ. of California Davis, California	**81-CRSR-2-0732	**8401021	$258,951**	**07/01/81	**02/28/85	National Fruit and Nut Germplasm Repository
Univ. of California Davis, California	**81-CRSR-2-0732	**8401840	$25,000**	**07/01/81	**08/31/85	National Fruit and Nut Germplasm Repository
Iowa State Univ. Ames, Iowa	**82-CRSR-2-1009	**8401041	$55,739**	**05/01/82	**04/30/86	Pathogen Resistance and Nutritional Content of Lycopersicon Spp. P. I. Accessions
Cornell Univ. Ithaca, New York	**82-CRSR-2-2027	**8401828	$120,000**	**09/01/82	**08/31/85	Clonal Repository for Apples and Grapes
Oregon State Univ. Corvallis, Oregon	**81-CRSR-2-0680	**8401727	$350,000**	**03/15/81	**03/31/85	Collect, Evaluate, Maintain and Distribute Germplasm of Clonally Propagated Crops
Univ. of Wisconsin Madison, Wisconsin	**82-CRSR-2-2028	**8401060	$60,000**	**09/01/82	**12/31/85	Germplasm Evaluation in the Tuber-Bearing Solanums

TOTAL $869,690

PROGRAM AREA: PEACH TREE SHORT LIFE, SOUTH CAROLINA
PUBLIC LAW 89-106--SPECIAL RESEARCH GRANTS PROGRAM
FISCAL YEAR 1984

Clemson Univ. Clemson, South Carolina	84-CRSR-2-2378	8401652	$185,123	05/15/84	10/31/86	Factors Contributing to and Control of Peach Tree Short Life in South Carolina

**AMENDMENT

PROGRAM AREA: BLUEBERRY SHOESTRING VIRUS CONTROL
PUBLIC LAW 89-106--SPECIAL RESEARCH GRANTS PROGRAM
FISCAL YEAR 1984

ORGANIZATION	GRANT NUMBER	PROPOSAL NUMBER	TOTAL	AGREEMENT PERIOD FROM	TO	TITLE
Michigan State Univ. East Lansing, Michigan	**81-CRSR-2-0675	**8401008	$92,561**	**01/13/81	**01/31/85	An Integrated Approach to Blueberry Shoestring Virus Disease Control
			TOTAL $ 92,561			

PROGRAM AREA: MOSQUITO RESEARCH, RICELAND AGROECOSYSTEM
PUBLIC LAW 89-106--SPECIAL RESEARCH GRANTS PROGRAM
FISCAL YEAR 1984

ORGANIZATION	GRANT NUMBER	PROPOSAL NUMBER	TOTAL	AGREEMENT PERIOD FROM	TO	TITLE
Texas A&M Research Fdn. College Station, Texas	**82-CRSR-2-1010	**8401750	$462,807**	**07/01/82	**06/30/85	Riceland Mosquito Management Program
			TOTAL $462,807			

PROGRAM AREA: TCK SMUT (WHEAT)
PUBLIC LAW 89-106--SPECIAL RESEARCH GRANTS PROGRAM
FISCAL YEAR 1984

ORGANIZATION	GRANT NUMBER	PROPOSAL NUMBER	TOTAL	AGREEMENT PERIOD FROM	TO	TITLE
Univ. of Idaho Moscow, Idaho	**82-CRSR-2-1024	**8401734	$59,759**	**07/01/82	**02/28/85	Detection and Control of TCK Smut in Winter Wheat
Montana State Univ. Bozeman, Montana	**82-CRSR-2-1006	**8401028	$59,759**	**04/15/82	**04/30/85	Research for Controlling Dwarf Smut (TCK) in Hard Red Winter Wheat in Montana
Oregon State Univ. Corvallis, Oregon	**82-CRSR-2-1005	**8401122	$86,173**	**04/01/82	**04/30/85	Control of Dwarf Smut (TCK) Tilletia controversa of Soft White Wheat
Utah State Univ. Logan, Utah	**82-CRSR-2-1007	**8401022	$42,331**	**04/15/82	**01/31/85	Control of Dwarf Bunt (TCK) of Wheat Through Breeding Resistant Varieties
Washington State Univ. Pullman, Washington	84-CRSR-2-2357	8401099	$100,047	04/01/84	03/31/87	TCK Smut of Wheat
**AMENDMENT			TOTAL $348,069			

PROGRAM AREA: SUNFLOWER MIDGE, NORTH DAKOTA
PUBLIC LAW 89-106--SPECIAL RESEARCH GRANTS PROGRAM
FISCAL YEAR 1984

ORGANIZATION	GRANT NUMBER	PROPOSAL NUMBER	TOTAL	AGREEMENT PERIOD FROM	TO	TITLE
North Dakota State Univ. Fargo, North Dakota	84-CRSR-2-2362	8401018	$144,627	04/01/84	03/31/88	Management of Sunflower Insects
		TOTAL	$144,627			

PROGRAM AREA: TROPICAL & SUBTROPICAL RESEARCH
PUBLIC LAW 89-106--SPECIAL RESEARCH GRANTS PROGRAM
FISCAL YEAR 1984

ORGANIZATION	GRANT NUMBER	PROPOSAL NUMBER	TOTAL	AGREEMENT PERIOD FROM	TO	TITLE
Univ. of California Irvine, Californnia	**83-CRSR-2-2209	**8401740	$77,362**	**08/01/83	**07/31/85	Taro Improvement
Univ. of Florida Gainesville, Florida	84-CRSR-2-2479	8401813	$30,603	07/01/84	06/30/85	Arginine Level in Coconut Germplasm in Relation to Lethal Yellowing Resistance
Univ. of Florida Gainesville, Florida	84-CRSR-2-2480	8401814	$41,069	07/01/84	06/30/85	Vaccine Development for Ruminant Anaplasmosis
Univ. of Florida Gainesville, Florida	84-CRSR-2-2481	8401815	$46,355	07/01/84	06/30/85	Identification and Characterization of Geminiviruses Occurring in the Caribbean Basin
Univ. of Florida Gainesville, Florida	84-CRSR-2-2482	8401816	$42,250	07/01/84	06/30/85	Heat Stress of Fruit Trees and Ornamental Plants in the Virgin Islands
Univ. of Florida Gainesville, Florida	84-CRSR-2-2483	8401817	$27,132	07/01/84	06/30/85	Life History Strategies and Migration in Fall Armyworm and Velvetbean Caterpillar
Univ. of Florida Gainesville, Florida	84-CRSR-2-2506	840182C	$47,884	07/01/84	06/30/85	Persistence, Productivity and N Value of Tropical Legumes in Grass Pastures
Univ. of Florida Gainesville, Florida	84-CRSR-2-2507	8401821	$32,318	07/01/84	06/30/85	Tropical Virus and Mycoplasma (Spiroplasma) Diseases of Corn in Florida-AREC, Belle Glade

ORGANIZATION	GRANT NUMBER	PROPOSAL NUMBER	TOTAL	AGREEMENT PERIOD FROM	TO	TITLE
Univ. of Florida Gainesville, Florida	84-CRSR-2-2508	8401823	$18,337	07/01/84	06/30/85	Improvement of Tomatoes Under High Temperatures and Humidity
Univ. of Florida Gainesville, Florida	**83-CRSR-2-2163	**8301775	$35,279**	**07/01/83	**06/30/85	Quality Evaluation of Tropical Grass-Legume Pastures
Univ. of Florida Gainesville, Florida	**83-CRSR-2-2080	**8401007	$25,000**	**01/01/83	**12/31/84	Caribbean Basin Advisory Group (CBAG) Management for Tropical and Subtropical Agriculture
Univ. of Florida Gainesville, Florida	**83-CRSR-2-2150	**8401765	$27,313**	**07/01/83	**06/30/85	Improvement of Edible Aroids Through Virus Elimination and Tissue Culture
Univ. of Florida Gainesville, Florida	**83-CRSR-2-2161	**8401766	$19,295**	**07/01/83	**06/30/85	Population Improvement of Snap Beans and Mapping of Induced Marker Mutations
Univ. of Florida Gainesville, Florida	**83-CRSR-2-2211	**8401768	$50,000**	**07/01/83	**06/30/85	The Natural History of Potential Vectors of African Swine Fever in the Caribbean Basin
Univ. of Florida Gainesville, Florida	**83-CRSR-2-2168	**8401769	$23,643**	**07/01/83	**06/30/85	Environmental Factors Influencing Hardseed Expression in Soybeans
Univ. of Florida Gainesville, Florida	**83-CRSR-2-2151	**8401770	$8,800**	**07/01/83	**06/30/85	Tropical Virus and Mycoplasma Diseases of Corn in Florida
Univ. of Florida Gainesville, Florida	**83-CRSR-2-2143	**8401771	$48,576**	**08/01/83	**07/31/85	Aroids for Food and Biomass in the Tropics
Univ. of Florida Gainesville, Florida	**83-CRSR-2-2144	**8401772	$17,828**	**08/01/83	**07/31/85	Food Legume Response to Rhizobium Inoculation in Tropical Soils
Univ. of Florida Gainesville, Florida	**83-CRSR-2-2136	**8401773	$14,500**	**07/01/83	**06/30/85	Role of Xylem-limited Bacterial Disease as a Cause of Citrus Decline
Univ. of Florida Gainesville, Florida	**83-CRSR-2-2138	**8401774	$20,000**	**08/01/83	**07/31/85	Ratoon Stunting Disease Resistance in Sugarcane
Univ. of Florida Gainesville, Florida	**83-CRSR-2-2134	**8401806	$75,000**	**08/01/83	**07/31/85	Breeding, Selection, Agronomic, and Grazing Evaluation of Tropical Legumes

ORGANIZATION	GRANT NUMBER	PROPOSAL NUMBER	TOTAL	AGREEMENT PERIOD FROM	AGREEMENT PERIOD TO	TITLE
Univ. of Florida Gainesville, Florida	**83-CRSR-2-2149	**8401807	$21,732**	**07/01/83	**06/30/85	Lethal Yellows and Hartrot Diseases of Coconut Palms
Univ. of Florida Gainesville, Florida	**83-CRSR-2-2162	**8401808	$54,480**	**07/01/83	**06/30/85	Biological Control of Tropical and Subtropical Mole Crickets
Univ. of Florida Gainesville, Florida	**83-CRSR-2-2135	**8401810	$58,570**	**08/01/83	**07/31/85	Characterization of Citrus Tree Declines in Florida, Brazil and Argentina
Univ. of Florida Gainesville, Florida	**83-CRSR-2-2141	**8401825	$70,524**	**08/01/83	**07/31/85	Development of Fungi to Commercialization of the Microbial Control of Root Weevil Pests
Univ. of Florida Gainesville, Florida	**83-CRSR-2-2169	**8401826	$34,221**	**07/01/83	**06/30/85	An Integrated Approach for the Control of Bacterial Spot of Tomato and Pepper
Univ. of Guam Mangilao, Guam	84-CRSR-2-2462	8401778	$26,000	07/01/84	06/30/85	Developing Crop Models for Cassava, Corn and Papaya on Guam
Univ. of Gaum Mangilao, Guam	84-CRSR-2-2461	8401781	$40,000	07/01/84	06/30/85	Potential of Potato in Guam, Saipan and Other Micronesian Islands
Univ. of Guam Mangilao, Guam	**83-CRSR-2-2166	**8401795	$49,000**	**07/01/83	**12/31/85	Potential of Cassava as Food and Feed in Micronesia
Univ. of Guam Mangilao, Guam	**83-CRSR-2-2167	**8401796	$53,000**	**07/01/83	**11/30/85	Management of Ostrinia furnacalis on Corn in Micronesia
Univ. of Guam Mangilao, Guam	**83-CRSR-2-2165	**8401797	$38,000**	**07/01/83	**11/30/85	Potential of Winged Bean as a Crop for Guam and the Northern Marianas
Univ. of Guam Mangilao, Guam	**83-CRSR-2-2292	**8401798	$28,000**	**08/01/83	**10/31/85	Evaluation of Produce Market Potential and Production Constraints on Guam and in Micronesia
Univ. of Guam Mangilao, Guam	**83-CRSR-2-2310	**8401799	$31,000**	**09/01/83	**11/30/85	Effect of Varied N, P, and K Fertilization: Yield of Selected Vegetables Grown on Micronesia
Univ. of Guam Mangilao, Guam	**83-CRSR-2-2164	**8401800	$36,000**	**07/01/83	**09/30/85	Micronesian Area Tropical Agriculture Data Base Center

ORGANIZATION	GRANT NUMBER	PROPOSAL NUMBER	TOTAL	AGREEMENT PERIOD FROM	AGREEMENT PERIOD TO	TITLE
Univ. of Guam Mangilao, Guam	**83-CRSR-2-2291	**8401801	$35,980**	**07/01/83	**09/30/85	The Biological Control of Chromolaena odorata (L.) K. and R.
Univ. of Hawaii--Manoa Honolulu, Hawaii	84-CRSR-2-2384	8401736	$31,530	07/01/84	06/30/85	Control of Papaya Ringspot and Citrus Tristeza
Univ. of Hawaii--Manoa Honolulu, Hawaii	84-CRSR-2-2385	8401737	$47,980	07/01/84	06/30/85	Characterization of the Maize Genome
Univ. of Hawaii--Manoa Honolulu, Hawaii	84-CRSR-2-2386	8401741	$40,528	07/01/84	06/30/85	Prediction of Maximum Yields of Sugarcane with Growth Simulation Models
Univ. of Hawaii--Manoa Honolulu, Hawaii	84-CRSR-2-2387	8401742	$23,273	07/01/84	06/30/85	A Potential Management Alternative for Highly-Diluted Swine Wastewater
Univ. of Hawaii at Manoa Honolulu, Hawaii	84-CRSR-2-2379	8401745	$22,358	07/01/84	06/30/85	Organization, Management and Performance-Effectiveness of HITAHR Research Units
Univ. of Hawaii--Manoa Honolulu, Hawaii	84-CRSR-2-2400	8401751	$43,000	07/01/84	06/30/85	Sap Analysis as a Guide to Efficient Fertilization of Tropical Vegetable Crops
Univ of Hawaii at Manoa Honolulu, Hawaii	84-CRSR-2-2454	8401762	$23,600	07/01/84	06/30/85	Biological Control of Exotic Weeds of the Pacific Basin with Plant Pathogens
Univ of Hawaii--Manoa Honolulu, Hawaii	84-CRSR-2-2478	8401809	$68,256	07/01/84	06/30/85	Predicting the Response of Crops to Inoculation with Mycorrhizal Fungi
Univ. of Hawaii Honolulu, Hawaii	**83-CRSR-2-2086	**8401027	$28,500**	**03/01/83	**06/30/85	Pacific Basin Advisory Group Management Grant for Tropical and Subtropical Research (Section 406)
Univ. of Hawaii Honolulu, Hawaii	**83-CRSR-2-2100	**8401725	$29,650**	**05/01/83	**04/30/85	Biological Nitrogen Fixation in Winged Beans Introduced to Pacific Islands
Univ. of Hawaii--Manoa Honolulu, Hawaii	**83-CRSR-2-2083	**8401728	$30,070**	**03/15/83	**03/14/85	Characterization and Control of Root-rotting Fungi of Tropical Crops

ORGANIZATION	GRANT NUMBER	PROPOSAL NUMBER	TOTAL	AGREEMENT PERIOD FROM	TO	TITLE
Univ. of Hawaii--Manoa Honolulu, Hawaii	**83-CRSR-2-2133	**8401730	$88,981**	**06/01/83	**05/31/85	A Correlation of Phosphorus and Sulfur Utilization Efficiencies with Specific Mineral Properties of Tropical Soils
Univ. of Hawaii--Manoa Honolulu, Hawaii	**83-CRSR-2-2293	**8401731	$88,906**	**07/01/83	**06/30/86	Allelopathy of Tropical Weeds
Univ. of Hawaii--Manoa Honolulu, Hawaii	**83-CRSR-2-2245	**8401732	$28,981**	**07/01/83	**06/30/85	Physiology of Tropical Crop Adaptations to Essential Nutrient Insufficiencies
Univ. of Hawaii--Manoa Honolulu, Hawaii	**83-CRSR-2-2299	**8401733	$19,477**	**07/01/83	**06/30/85	Rhizobium-Soil Erosion Interaction in Highly Weathered Tropical Soils
Univ. of Hawaii--Manoa Honolulu, Hawaii	**83-CRSR-2-2088	**8401738	$71,890**	**04/01/83	**06/30/86	Soil-Climate Criteria of Soil Taxonomy for Tropical Crop, Pasture, Forest Lands
Univ. of Hawaii--Manoa Honolulu, Hawaii	**83-CRSR-2-2290	**8401739	$162,000	**07/01/83	**12/31/85	Integrated Pest Mangement of Cabbage and Lettuce
Univ. of Hawaii--Manoa Honolulu, Hawaii	**83-CRSR-2-2082	**8401749	$52,640**	**03/15/83	**06/30/85	Postharvest Physiology and Handling of Tropical Fruits and Vegetables
Univ. of Hawaii--Manoa Honolulu, Hawaii	**83-CRSR-2-2312	**8401752	$43,866**	**08/01/83	**07/31/85	Prediction of Crop Performance from Climate-Growth Relationships
Univ. of Hawaii--Manoa Honolulu, Hawaii	**83-CRSR-2-2289	**8401753	$56,800**	**07/01/83	**06/30/85	Nutritional Limitations and Management Strategies for Wet-Fibrous Tropical Feeds
Louisiana State Univ. & A&M College Baton Rouge, Louisiana	**83-CRSR-2-2212	**8401811	$20,000**	**08/01/83	**07/31/85	Seed Dormancy in Red Rice
Univ. of Puerto Rico Mayaguez, Puerto Rico	84-CRSR-2-2468	8401794	$18,000	07/01/84	06/30/85	Improvement of Tomatoes Under High Temperatures and Humidity
Univ. of Puerto Rico Mayaguez, Puerto Rico	84-CRSR-2-2469	8401803	$22,000	07/01/84	06/30/85	Virus Diseases of Taniers in the Caribbean Basin

ORGANIZATION	GRANT NUMBER	PROPOSAL NUMBER	TOTAL	AGREEMENT PERIOD FROM	TO	TITLE
Univ. of Puerto Rico Mayaguez, Puerto Rico	84-CRSR-2-2470	8401804	$22,000	07/01/84	06/30/85	Feed Formulation to Satisfy the Amino Acid Requirements of Tiapia nilotica
Univ. of Puerto Rico Mayaguez, Puerto Rico	84-CRSR-2-2471	8401805	$35,000	07/01/84	06/30/85	Production and Quality Evaluation of Wines from Grapes Grown in Puerto Rico
Univ. of Puerto Rico Mayaguez, Puerto Rico	**83-CRSR-2-2159	**8401779	$27,310**	**07/01/83	**06/30/85	Comparison of Three Selection Methods for Large Seeded Dry Beans in the Tropics
Univ. of Puerto Rico Mayaguez, Puerto Rico	**83-CRSR-2-2219	**8401784	$20,000**	**08/01/83	**07/31/85	Cytotaxonomy of Diaprepes and Its Closest Allies
Univ. of Puerto Rico Mayaguez, Puerto Rico	**83-CRSR-2-2160	**8401785	$33,040**	**07/01/83	**06/30/85	Production of Bacterial Blight (Xanthomonas spp.) Resistant Bush Bean Germplasm
Univ. of Puerto Rico Mayaguez, Puerto Rico	**83-CRSR-2-2158	**8401786	$24,270**	**07/01/83	**06/30/85	Effect of Soil pH and Host Genotype on the Nodulation and Nitrogen Fixation of Leucaena spp.
Univ. of Puerto Rico Mayaguez, Puerto Rico	**83-CRSR-2-2213	**8401787	$51,500**	**08/01/83	**07/31/85	Development of Edible Mushrooms for the Tropical Americas
Univ. of Puerto Rico Mayaguez, Puerto Rico	**83-CRSR-2-2156	**8401788	$35,000**	**07/30/83	**06/30/85	Integrated Weed Control Management on Tomatoes and Peppers
Univ. Puerto Rico Mayaguez, Puerto Rico	**83-CRSR-2-2157	**8401789	$40,000**	**07/01/83	**06/30/85	Development of Resistant Plantains and Bananas Through Protoplast Fusion
Univ. of Puerto Rico Mayaguez, Puerto Rico	**83-CRSR-2-2217	**8401790	$35,000**	**08/01/83	**07/31/85	Control of Diaprepes abbreviatus and Phyllophaga spp. in Sugarcane in Puerto Rico
Univ. of Puerto Rico Mayaguez, Puerto Rico	**83-CRSR-2-2215	**8401791	$20,000**	**08/01/83	**07/31/85	Improved Methods for Multiplication of Pineapple Varieties
Univ. of Puerto Rico Mayaguez, Puerto Rico	**83-CRSR-2-2216	**8401792	$30,900**	**08/01/83	**07/31/85	Improvement of Hard Endosperm Opaque-2 Maize for the Lowland Tropics

ORGANIZATION	GRANT NUMBER	PROPOSAL NUMBER	TOTAL	AGREEMENT PERIOD		TITLE
				FROM	TO	
College of the Virgin Islands Kingshill, St. Croix, Virgin Islands	**83-CRSR-2-2155	**8401780	$45,450**	**07/01/83	**06/30/85**	Determination of the Epidemiology and Control of Bacterial Canker of Papaya
College of the Virgin Islands Kingshill, St. Croix, Virgin Islands	**83-CRSR-2-2154	**8401782	$20,150**	**07/01/83	**06/30/85	The Use of Soil Solarization to Control Plant Diseases in Virgin Islands
College of the Virgin Islands Kingshill, St. Croix, Virgin Islands	**83-CRSR-2-2214	**8401783	$66,300**	**08/01/83	**07/31/85	Irrigation Water Management for Tropical Crops

**AMENDMENT

TOTAL $2,873,257

PROGRAM AREA: DAIRY GOAT RESEARCH, PRAIRIE VIEW, A&M TEXAS
PUBLIC LAW 89-106--SPECIAL RESEARCH GRANTS PROGRAM
FISCAL YEAR 1984

ORGANIZATION	GRANT NUMBER	PROPOSAL NUMBER	TOTAL	FROM	TO	TITLE
Prairie View A&M Univ. Prairie View, Texas	84-CRSR-2-2349	8401014	$96,418	03/01/84	12/01/85	Energy and Protein Requirement of Dairy Goats

TOTAL $96,418

PROGRAM AREA: ACID PRECIPITATION
PUBLIC LAW 89-106--SPECIAL RESEARCH GRANTS PROGRAM
FISCAL YEAR 1984

ORGANIZATION	GRANT NUMBER	PROPOSAL NUMBER	TOTAL	AGREEMENT PERIOD FROM	AGREEMENT PERIOD TO	TITLE
Univ. of California Riverside, California	84-CRSR-2-2389	8401296	$56,796	06/01/84	05/31/86	Interaction of Acidic Precipitation and Ozone on Forest Tree Species in California
CT Agric. Expt. Station New Haven, Connecticut	84-CRSR-2-2390	8401264	$23,725	07/01/84	06/30/85	Kinetics of Solubilization by Precipitation of Organic Matter from Forest Soils
Univ. of Massachusetts Amherst, Massachusetts	84-CRSR-2-2391	8401269	$82,040	06/01/84	05/31/86	Susceptibility of the Reproductive Process in Corn to Acid Precipitation
Univ. of Missouri Columbia, Missouri	84-CRSR-2-2392	8401310	$65,801	06/15/84	12/31/87	Mycorrhizal Influences on the Aluminum Tolerance of Loblolly Pine and Sugar Maple
Univ. of New Hampshire Durham, New Hampshire	84-CRSR-2-2399	8401267	$89,555	06/01/84	09/30/86	Interaction of Acid Deposition and Root Disease in Decline of Red Spruce
Res. Fdn. of SUNY Albany, New York	84-CRSR-2-2393	8401302	$82,575	06/01/84	05/31/86	Red Spruce Growth Behavior in a Die-Back Forest on Whiteface Mountain, New York
Pennsylvania State Univ. Univ. Park, Pennsylvania	84-CRSR-2-2394	8401339	$90,000	07/01/84	06/30/86	Stress Indicators of Differential Plant Response to Acidic Precipitation and Ozone

PROGRAM AREA: ACID PRECIPITATION
PUBLIC LAW 89-106--SPECIAL RESEARCH GRANTS PROGRAM
FISCAL YEAR 1984

ORGANIZATION	GRANT NUMBER	PROPOSAL NUMBER	TOTAL	AGREEMENT PERIOD FROM	TO	TITLE
Univ. of Tennessee Knoxville, Tennessee	84-CRSR-2-2395	8401314	$89,613	06/01/84	05/31/87	Genetic and Environmental Factors Affecting Response of Soybeans to Acid Rain
Virginia Poly. Inst. and State Univ. Blacksburg, Virginia	84-CRSR-2-2396	8401270	$90,000	06/01/84	05/31/87	Growth Response and Drought Susceptibility of Forest Trees Exposed to Acid Rain and Ozone
		TOTAL	$670,105			

PROGRAM AREA: SUGARLAND USE RESEARCH, HAWAII
PUBLIC LAW 89-106--SPECIAL RESEARCH GRANTS PROGRAM
FISCAL YEAR 1984

ORGANIZATION	GRANT NUMBER	PROPOSAL NUMBER	TOTAL	AGREEMENT PERIOD FROM	TO	TITLE
Univ. of Hawaii--Manoa Honolulu, Hawaii	**83-CRSR-2-2152	**8401042	$144,627**	**07/01/83	**06/30/85	A Comprehensive Methodology for Identifying Alternative Crops for Hawaii
		TOTAL	$144,627			

PROGRAM AREA: POTATO RESEARCH
PUBLIC LAW 89-106--SPECIAL RESEARCH GRANTS PROGRAM
FISCAL YEAR 1984

ORGANIZATION	GRANT NUMBER	PROPOSAL NUMBER	TOTAL	AGREEMENT PERIOD FROM	TO	TITLE
Univ. of Idaho Moscow, Idaho	84-CRSR-2-2360	8401282	$64,836	04/15/84	04/30/85	Potato Development and Improvement in the Northwest
Univ. of Maine Orono, Maine	84-CRSR-2-2351	8401025	$57,836	04/01/84	02/28/85	Accelerated Eastern Russet Breeding
Univ. of Maryland College Park, Maryland	84-CRSR-2-2361	8401124	$20,000	05/01/84	04/30/85	Investigations Into Vitamin C, Methionine, Reducing Sugars, Glycoalkaloids and Tuber Storage Conditions in Potato
Cornell Univ. Ithaca, New York	**83-CRSR-2-2123	**8401045	$57,500**	**05/01/83	**04/30/85	Breeding Long, Russet Potato Varieties Adapted to the Eastern U.S.
Oregon State Univ. Corvallis, Oregon	84-CRSR-2-2397	8401743	$64,000	06/01/84	05/31/85	Potato Varietal Development in Oregon
Pennsylvania State Univ. Univ. Park, Pennsylvania	84-CRSR-2-2344	8401016	$57,500	02/01/84	01/31/85	Breeding Russet Potatoes Suitable for Commercial Production in the Eastern U.S.
Washington State Univ. Pullman, Washington	84-CRSR-2-2352	8401037	$64,000	03/15/84	09/14/85	Potato Development and Improvement in the Northwest
		TOTAL	$385,672			

**AMENDMENT

PROGRAM AREA: BIOMASS ENERGY RESEARCH, OREGON
PUBLIC LAW 89-106--SPECIAL RESEARCH GRANTS PROGRAM
FISCAL YEAR 1984

ORGANIZATION	GRANT NUMBER	PROPOSAL NUMBER	TOTAL	AGREEMENT PERIOD FROM	TO	TITLE
Oregon State Univ. Corvallis, Oregon	**83-CRSR-2-2314	**8401830	$771,344**	**06/01/83	**09/30/85	Combined Cycle Biomass Energy Research Project

TOTAL $771,344

PROGRAM AREA: ASPARAGUS YIELD DECLINE, MICHIGAN
PUBLIC LAW 89-106--SPECIAL RESEARCH GRANTS PROGRAM
FISCAL YEAR 1984

Michigan State Univ. East Lansing, Michigan	84-CRSR-2-2353	8401034	$96,418	03/15/84	03/31/85	Asparagus Decline Syndrome and Replant Problem in Michigan

TOTAL $96,418

PROGRAM AREA: HORTICULTURE STUDIES, POTEAU, OKLAHOMA
PUBLIC LAW 89-106--SPECIAL RESEARCH GRANTS PROGRAM
FISCAL YEAR 1984

Oklahoma State Univ. Stillwater, Oklahoma	84-CRSR-2-2510	8401827	$48,209	09/01/84	08/31/86	Irrigation Methods and Mulching for Tomato Production in Southeastern Oklahoma

TOTAL $48,209

PROGRAM AREA: INTEGRATED PRODUCTION SYSTEMS
PUBLIC LAW 89-106--SPECIAL RESEARCH GRANTS PROGRAM
FISCAL YEAR 1984

Oklahoma State Univ. Stillwater, Oklahoma	84-CRSR-2-2398	8401746	$192,836	07/01/84	06/30/87	Fruit and Vegetable Investigations in Southeast Oklahoma

TOTAL $192,836

**AMENDMENT

PROGRAM AREA: BIOCONTROL OF GRASSHOPPERS, KANSAS
PUBLIC LAW 89-106--SPECIAL RESEARCH GRANTS PROGRAM
FISCAL YEAR 1984

ORGANIZATION	GRANT NUMBER	PROPOSAL NUMBER	TOTAL	AGREEMENT PERIOD FROM	TO	TITLE
Kansas State Univ. Manhattan, Kansas	84-CRSR-2-2345	8401015	$48,209	02/01/84	07/31/85	Development of Entomophaga gryllii for Biological Control of Grasshoppers

TOTAL $48,209

PROGRAM AREA: WOOL RESEARCH, TEXAS
PUBLIC LAW 89-106--SPECIAL RESEARCH GRANTS PROGRAM
FISCAL YEAR 1984

ORGANIZATION	GRANT NUMBER	PROPOSAL NUMBER	TOTAL	AGREEMENT PERIOD FROM	TO	TITLE
Texas A&M Univ. College Station, Texas	84-CRSR-2-2465	8401793	$144,627	09/01/84	08/31/85	The Use of Objective Measurements to Improve Wool and Mohair

TOTAL $144,627

PROGRAM AREA: AGRICULTURAL POLICY INSTITUTE
PUBLIC LAW 89-106--SPECIAL RESEARCH GRANTS PROGRAM
FISCAL YEAR 1984

ORGANIZATION	GRANT NUMBER	PROPOSAL NUMBER	TOTAL	AGREEMENT PERIOD FROM	TO	TITLE
Iowa State Univ. of Science & Technology Ames, Iowa	84-CRSR-2-2377	8401033	$192,836	04/01/84	03/31/85	Center for Trade and Agricultural Policy at Iowa State University
Univ. of Missouri Columbia, Missouri	84-CRSR-2-2376	8401032	$241,045	04/01/84	03/31/85	Food and Agricultural Policy Research Institute

TOTAL $433,881

OBLIGATION OF SPECIAL RESEARCH GRANT FUNDS

Question: Does the Department of Agriculture intend to obligate the FY 1985 funds appropriated for Special Research Grants or will you request a rescission?

Answer: The Department is vigorously pursuing the obligation of the fiscal year 1985 funds appropriated for Special Research Grants and all funds will be obligated before the end of the fiscal year.

Question: What do you consider the accomplishments of this program to date?

Answer: These grants programs have concentrated on problems of national interest beyond the normal emphasis in the formula programs. The Special Research Grants program has enabled the agricultural research scientists to focus their efforts in such important areas as pesticide clearance, minor use animal drugs, animal health, pesticide impact assessment, germplasm resources, and acid precipitation.

The Special Research Grants program has been a good mechanism to focus research effort on problems of national interest, and to compliment other Federal, State and private industry funds and efforts.

TRAVEL EXPENSES

Question: Although your budget is being cut more than 12 percent and the number of full-time personnel is staying the same, your travel budget is going up from $466,000 to $491,000. Why is your travel budget going up?

Answer: The approximately five percent increase in costs is to provide for estimated inflationary and rate increases.

QUESTION SUBMITTED BY SENATOR BUMPERS

STUDIES BEING CONDUCTED IN ARKANSAS

Question: Does this administration intend to eliminate the mosquito research and integrated pest management studies currently being conducted in Arkansas?

Answer: In fiscal year 1984 a Special Research Grant was made to the University of Arkansas, as part of the National/Regional Program for Integrated Pest Management, for the period from September 15, 1984, to September 30, 1985. A similar grant is anticipated to be awarded in fiscal year 1985 to members of the southern region participating in the National/Regional Program for Integrated Pest Management. The University of Arkansas also participates in a grant made to fund a multi-university consortium to conduct research on riceland mosquito management. The fiscal year 1985 grant extends through June 30, 1986. Research proposed under the objectives of the current research projects will be completed. However, in line with the administration's overall reduction in Federal spending, no funds are proposed for Special Research Grants in fiscal year 1986.

EXTENSION SERVICE

QUESTIONS SUBMITTED BY SENATOR COCHRAN

AGRICULTURAL ECONOMY

Question: What impact will Extension Service's reduced funding have on our farmers' survival and recovery?

Answer: The survival and recovery of most farmers who are faced with severe financial problems will depend on how they are able to make adjustments in their farm business and financial affairs. Extension staff have been rapidly increasing their efforts to assist farmers in making the adjustments needed to improve cost of production efficiency, increase total farm profitability, and to deal with financial management problems. Of the earmarked programs proposed for termination, the $1 million Financial Management program begun in FY 1985 relates most directly to farmers' survival and recovery. The Pest Management and Pesticide Impact Assessment programs are also structured to relate to farm efficiency. Elimination of these programs may slightly decrease the Cooperative Extension System's capacity to deal with the problems of farmers' survival and recovery. A great deal depends on the modifications made by the States in their resource levels for these programs.

Question: Is ES needed more now than ever before given the changing setting of today's agriculture (i.e., the financial constraints, need to increase their efficiency in order to be profitable, the rapidly changing technology, etc.)?

Answer: In view of this increasingly complicated environment and risks facing farmers, Extension programs can continue to help farmers develop and implement production, management and marketing strategies for increasing their profitability and chances of survival.

Question: Many new challenges face rural America today: new technology, credit problems, move to more market-oriented programs, increased dependence on export markets, and a number of other items. Have these affected Extension's role? How?

Answer: They have affected Extension's role by bringing about a redirection and an intensification of our responsibility to meet the economic educational needs in rural America. The Cooperative Extension system is developing educational programs focusing on optimum economic returns to farm producers. Such programs teach farm management using a whole farm approach, helping farmers tie production alternatives to marketing opportunities, and reaching financially viable decisions. Risk management is being incorporated more intensely into production of crops and livestock to minimize risks of costly price changes. Specific Extension programs are being redesigned for capital investment programs, borrowing, marketing alternatives, market outlook and market demand--both domestic and foreign, incorporating foreign exchange rates, varying interest rates, and a number of other economic items that affect the farmer's decisionmaking process. Extension's programs are being redesigned to meet these challenges.

Question: You indicated that formula programs would permit state cooperators to address "clientele" requests. Does each state have its own "clientele" interests," or are there a number of similar themes running across state lines?

Answer: Basically, each state has its own clientele interest. That is not to say that these interests may not be similar, running across state and even regional lines, but state lines delineate a political obligation to clientele interests within the state. Because of this individual state "allegiance," the role of the federal Extension Service is emphasized; it coordinates and extends individual state programs across state and regional lines. It is through this coordinating role of Extension Service-USDA that the Cooperative Extension concept is promoted, because individual states are not compelled to extend beyond their own boundaries or to accept programs of other states.

Question: In the case of similar themes, wouldn't earmarked programs represent a more efficient, coordinated approach?

Answer: It depends upon the similar theme. Earmarked funds are important to carry out national priority programs. These represent programs that reflect national concerns and interests that may not receive equal emphasis in all states if funds were distributed by the Smith-Lever formula. Earmarked funds obligate the state to devote attention to the program. There may also be individual state concerns of similar themes running across state lines that are recognized by all states as a program priority; each state could redirect a portion of the formula funds to meet that specific program according to the state's needs. Earmarked funds may serve as "seed money" to encourage rapid implementation of a program to meet a specific need.

Question: To what extent are you having to devote significant effort to specialized, perhaps emergency, interests?

Answer: At the Federal level we do not have the flexibility to redirect financial resources to meet emergency interests. The ES-USDA staff is however heavily involved with our State Cooperators in reacting to specialized clientele needs or responding to priorities that effect the States or are national in scope in terms of coordination of program or developing and disseminating new ideas. The farm financial crisis which we having been addressing for the past year has taken considerable time and effort of the national staff and it is estimated that one-fifth of the total Cooperative Extension Service resources were directed to respond to this crisis.

Question: Are state and local sources continuing to fund about two-thirds of the extension effort?

Answer: Yes. In the last ten years, the Federal portion of the total resources in the Cooperative Extension system has fallen from 40% to 33%. The States have increased their percentage from

41% to 45%. County and local resources have remained at the same proportional level.

Question: Several of the ES programs earmarked for reduction have been serving specialized needs: nutrition education and improvement for low income families through the Expanded Food and Nutrition Education Program (EFNEP), for example, or financial management assistance to farmers having difficulties. These can be important programs for certain target groups. Do you anticipate that private industry or states will pick up these activities, or will the services simply stop?

Answer: During the years the earmarked programs have been funded each State has been able to use the resources and supplement the programs as they saw the need in their particular area. The capability to conduct some of these programs, especially in the pest and pesticide control area, is available, and we would encourage the participation. However, we would expect most States would be forced to sharply curtail their efforts with regard to the EFNEP program.

EXPANDED FOOD AND NUTRITION EDUCATION PROGRAM (EFNEP)

Question: The proposed budget eliminates EFNEP. In view of the financial crunch hitting rural America today, aren't many of the recipients of this program people who really need increased nutrition and meal-planning assistance to have adequate diets? Isn't there an increased need to help low-income families manage scarce resources and plan nutritious diets now?

Answer: Yes, the target audience of EFNEP, low income families with young children, are generally the people who are most in need of the educational assistance provided by EFNEP. They learn how to plan, select, buy, prepare, serve and preserve food, so as to provide themselves and their family the most nutritious meals possible within their resources. These families do need special assistance for they are a most difficult group to reach yet have some of the greatest need for educational programs.

Question: How many families are now served by EFNEP?

Answer: In FY84, 235,194 homemakers were enrolled in the EFNEP, representing about 893,737 family members. Since 1968, more than 2.6 million low income families representing 10.6 million family members have been given practical nutrition education through EFNEP.

Question: What percentage of the EFNEP funds are devoted to families on food stamps? On WIC?

Answer: In FY84, 64 percent of EFNEP participants were in the food stamp program and 31 percent were in the WIC program.

Question: Isn't there tremendous return on the dollar investment in terms of reduced waste and improved nutritional status of the recipients?

Answer: Improved nutritional status of the family is demonstrated in their retention of knowledge and practices learned in the EFNEP program. Many families are motivated as a result of their EFNEP participation to continue their learning experiences in other ways or in other Extension programs.

Question: Isn't it a cost-effective program, given the high number of paraprofessionals and volunteers associated with it?

Answer: EFNEP uses paraprofessional, usually from the same community in which they teach, to work in this educational program. Taught and supervised by professionals, this method allows both efficiency and effectiveness in outreach methodology. At the same time this training provides these paraprofessionals with skills useful for a variety of employment opportunities. The Extension Service for many years has been effectively using volunteers. In the EFNEP there are about 90 volunteers per professional employee in the program, or 12 times as many volunteers as paraprofessional aides in the program.

Question: How can we be assured that those most needing the program will get it?

Answer: The statistics of the program clearly show that over the years EFNEP continues to enroll and reach the most needy families and those with the lowest incomes. All EFNEP families are in the low-income range. In FY 84, 93 percent of the families had incomes below the established poverty level, and 84 percent had incomes of $5,000 or less. The average size of EFNEP families is 3.8 persons.

Question: Is it likely that there will be enough formula fund money and sufficient interest to reach all these people?

Answer: It is not likely that sufficient formula funding could be allocated to sustain all the elements of this program for low-income nutrition education to take care of our present EFNEP clientele load. The commitment to serve the low-income audience is apparent in many States' "in-kind" contributions to the EFNEP program, but the level of funding required is not likely to be met in most States.

Question: HNIS has a national food survey planned for FY 1986. Wouldn't EFNEP be a logical program for helping eliminate some of the deficiencies identified by this survey?

Answer: Elements of the EFNEP could be used to disseminate the information needed to educate the low-income families in correcting the nutritional deficiencies identified in the HNIS national foods survey.

4-H

Question: I believe you have been working on some new program directions for 4-H. Could you describe these?

Answer: A "Panel on the Future of 4-H" has been convened to address the need for long-range changes in 4-H. The panel consists of the Administrator of Extension, Directors of State Cooperative Extension, Deputy Administrator of Extension for 4-H, State Assistant Directors, 4-H and National 4-H Council with input from 4-H'ers, volunteer leaders, extension agents and outside consultants. The panel's report is to be completed this Fall. Presently, there are expanding programs in electronic technology, international education, youth as volunteers, career education, citizenship/leadership and the agricultural sciences. Nutrition education is our single largest program.

Question: Last year you indicated that urban 4-H programs were growing most rapidly. Is this still the trend and, if so, what are the major activities there?

Answer: There are currently 802,410 4-H'ers in central cities and 349,117 in suburbs of cities which is a decrease of 1% and 18% respectively below 1983. There are also 864,977 4-H'ers in the town/city category of 10 - 50,000 size communities. The total enrollment in urban areas equals 46% of total 4-H participation.

The major activities revolve around 4-H clubs and special interest groups in project areas like embryology, foods and nutrition, safety, clothing, housing, plant science, economics, careers, natural resources, energy, health and community development. The traditional 4-H activities like camps, fairs, field days, educational tours, day camps, and cultural experiences are popular in urban settings.

Question: What percentage of the membership is from rural areas and what percentage from urban communities?

Answer: The participation from farm areas is 16.5%, town/non-farm rural, 38%; town/city, 10 - 50,000, 19.5%; suburbs of cities, 8%, and central cities, 18%. This provides a rural involvement of 54% and urban membership of 46%.

Question: Much of the EFNEP effort is directed toward young people. What relationships exist between EFNEP and 4-H? Are there formal program ties?

Answer: EFNEP and 4-H are intricately involved in the cooperation and support for each program. While no formal program tie is in existence, the two efforts are closely related and administered, for example:

The youth participating in EFNEP educational programs are identified as 4-H members in most States and they are eligible to participate in other 4-H learning experiences such as camps, conferences, workshops; 4-H clubs and special interest groups. At the national level limited members of 4-H EFNEP youth have attended National 4-H Conference, 4-H Congress and 4-H Citizenship Forums at the National 4-H Center.

Each year for the past 7 years, a few paraprofessionals and volunteer leaders with 4-H EFNEP responsibility have attended training at the National 4-H Food and Nutrition Leader Forum.

The two new 4-H food and nutrition projects "Fit it All Together", produced nationally were designed with EFNEP youth groups as one audience. States have tested and adapted these materials as needed for low-income audiences.

Nearly 30 States have recently developed 4-H exploring projects as introduced for potential 4-H members. These projects incorporate a variety of learning experiences related to food/nutrition, clothing, consumer/natural resources and, plant and animal sciences. In some States these projects are stepping stones for 4-H EFNEP members to move in to 4-H clubs and special interest groups.

Question: Could 4-H pick up much of the EFNEP youth effort that you have proposed eliminating?

Answer: More than 41,775 volunteers support the 4-H EFNEP program. These volunteers are trained and supervised by the paraprofessionals and Extension staff paid primarily by formula funds.

Loss of EFNEP funds would eliminate the majority of paraprofessionals and professionals with responsibility to work with low-income volunteers at a time when States are downsizing Extension 4-H staff. Although there is evidence that some States would continue to support these activities if identified as a critical need and local support was available. Absorption of the EFNEP youth would be difficult without the support from within State, local or private sector resources.

Question: What is happening with 4-H enrollments today? If there are changes, what would account for these?

Answer: In the last few years the 4-H enrollment reports from States indicate a decline in 4-H enrollments from a high of 7.2 million in 1974 to 4.4 million in 1984. However, at the same time we have seen a comparable decline in the population age group of 9-19 which is the 4-H membership age. In the last 10-12 years the 4-H program has enrolled about 11-12% of the potential population. This is comparably the same percentage as in 1974.

Two other significant factors account for this trend. First, there has been a decline in professional staff time spent working with Extension youth programs from a high of 5,410 FTE's in 1974 to the current level of 4,347 FTE's. There appears to be a correlation between decline in youth and professional staff.

Secondly, the Extension professional is more efficient in using volunteers for various tasks critical to developing a supportive environment for 4-H educational programs. In 1968 the ratio of volunteers to professionals was 90.1; the 1983 ratio was 142.1. Volunteers increased from 543,723 in 1973 to the current level of 630,409. This effort of the staff to recruit and train the volunteers has made a difference in Extension being able to continue educational programming for a significant number of youth but, while the program is more efficient it is less effective in reaching larger numbers of participants.

Question: In your statement, Dr. Greenwood, you mentioned the cooperation and commitment of the private sector to extension programs, citing specifically the 2.8 million volunteers to illustrate your point. I know the 4-H program is one activity that benefits greatly from the private sector, both in funding and volunteerism. Could you please indicate how many of your volunteers work with the 4-H effort and at the same time, indicate the other major programs that benefit from volunteerism?

Answer: 4-H estimates approximately one million volunteers in their overall 4-H effort. Of this number, 631,000 are in formal volunteer roles. At the same time, the Home Economics and Human Nutrition areas indicate approximately one million volunteers carry out their work throughout the Extension system. 500,000 of these volunteers are home makers. Agricultural Programs work with about 500,000 volunteers. Natural Resources and Rural Development programs account for almost 300,000 volunteers throughout the country.

PESTICIDE IMPACT ASSESSMENT

Question: Pesticides are one of the most controversial, rapidly-changing, economically-important aspects of agriculture. In view of this, it seems to be that the role played by ES in ensuring appropriate registration or reregistration of pesticides is crucial. Could you please explain what ES has been doing in the past, and what could be the potential impact on farmers if Extension's role is eliminated?

Answer: Through the National Agricultural Pesticide Impact Assessment Program (NAPIAP), Extension Specialists having the background, experience, and understanding of local, State, and regional pesticide programs and pest control practices, assemble benefit-use information for retaining those pesticides necessary for adequate food and fiber production. Their involvement ensures that farmers and ranchers needs and complex problems at a grass-roots level are brought forth and dealt with in a highly complex and often controversial decisionmaking process. The Extension Service and other USDA agencies have addressed more than 50 pesticide active ingredients. The potential adverse economic impact of cancellation of the first 21 pesticides or groups of pesticides under consideration is estimated at over $6 billion annually. The potential impact on farmers if Extension's role is reduced would be that data and information from ES field work and result demonstrations with farmers and ranchers to provide accurate and scientific technical data for defining and evaluating risks of selected pesticides having critical agricultural and forestry uses in registering pesticides will not be available. This will force the EPA to rely on existing information rather than also including current grass-roots benefit-use data from current and ongoing agricultural field operations. The connecting link of ES between the farmer and the government for inputs to registering pesticides would not exist.

Question: How are FY 1985 funds being spent, by location?

Answer: [The information follows:]

Smith-Lever Act: Section 3(d)	FY 1985
Alabama	$ 25,476
Alaska	8,528
Arizona	16,710
Arkansas	40,104
California	88,335
Colorado	19,778
Connecticut	11,387
Delaware	11,155
Florida	35,986
Georgia	56,499
Guam	8,665
Hawaii	11,409
Idaho	19,556
Illinois	79,949
Indiana	41,266
Iowa	76,744
Kansas	34,329
Kentucky	21,985
Louisiana	24,233
Maine	13,981
Maryland	17,127
Massachusetts	14,793
Michigan	33,665
Minnesota	51,628
Mississippi	40,376
Missouri	37,055
Montana	17,034
Nebraska	51,345
Nevada	9,872
New Hampshire	9,665
New Jersey	15,294
New Mexico	12,128
New York	30,538
North Carolina	45,990
North Dakota	21,338
Ohio	42,017
Oklahoma	27,810
Oregon	21,159
Pennsylvania	25,456

Puerto Rico	8,557
Rhode Island	10,575
South Carolina	26,672
South Dakota	20,266
Tennessee	23,877
Texas	78,280
Utah	11,776
Vermont	10,353
Virgin Islands	9,025
Virginia	24,058
Washington	27,439
West Virginia	11,658
Wisconsin	35,122
Wyoming	10,977
Special Projects	235,000
TOTAL	$1,716,000

INTEGRATED PEST MANAGEMENT

Question: You have justified eliminating the integrated pest management program "because of the growth and acceptance of IPM during the past several years." Does this imply that so much has been accomplished in past efforts that continued assistance is no longer necessary?

Answer: Because of the need for fiscal restraint, we have proposed the elimination of the earmarked budget item. However, we feel the program will continue to be a priority item, and that States will direct as much resource base as possible to program activities.

Question: I'm particularly interested in Mississippi, of course, and know of the increased economic benefit for Mississippi cotton farmers from the cotton pest management activities. What do you feel is the situation in Mississippi today?

Answer: In 1984, the Mississippi cotton pest management program was largely responsible for a $15 million decrease in costs of pest control and that it helped increase cotton growers' income by $120 million. This resulted from expenditure of approximately $500,000 in Cooperative Extension resources, and payment of $4,500,000 by cotton growers for IPM services supplied by consultants or other private and public agents.

Question: You say the private sector is expected to meet, to some degree, IPM producers' demands for most services initiated by ES. Why do you feel this will happen? What will be the outcome if private enterprises don't pick up the initiative, both in terms of past work and future needs?

Answer: Farmers recognize the value of IPM and are willing to pay for IPM services. Agricultural consultants, cooperatives, and other organizations can provide these services with technical support from Extension.

In the unlikely event that the private sector does not adequately respond to the demand for IPM services, State Extension Services could continue to provide educational programming targeted at farmers. Some farmers who have participated in IPM in the past would be unable to continue, and our plans to rely on the private sector as extenders of IPM technology would have to be revised.

FARM SAFETY

Question: What is the main focus of the farm safety activity?

Answer: Of the 25 farm safety related activities, tractor and machinery safety are the primary items. Programs for youth have been an important part of the activity. In the last few years, health related programs have received increased emphasis.

Question: What types of things are being accomplished through the program that would not be accomplished in other ways if the program were not available?

Answer: Most notably, farm safety leadership in program development and delivery. Also work with the private sector on specific needs would probably not occur.

Question: The explanatory notes say "the importance of the Farm Safety program has been demonstrated so effectively that more than half of the states are now able to continue this type assistance even without this specific funding." Have states already done this on their own?

Answer: Most States have supplemented the Farm Safety Smith-Lever funds in order to accommodate a full-time program. The elimination of the 3d funds would probably leave the Extension system with 10 full-time programs. Thirteen half-time programs. Eight programs would be no more than one-fourth time and 19 programs would be almost non-existence.

Question: To what extent have the poultry association, the millers association, and other similar groups contributed to these efforts?

Answer: These associations and other similar ones have been excellent cooperators with farm safety programs. Activities have included sponsoring meetings, conferences, and seminars of farm safety problems and assisting in the development of educational programs to meet the concerns of safety within their industries.

Question: If agriculture is still among the high accident-rate industries, it seems to me that we need to be sure that the work for farm safety continues. A 5-percent drop in the accidental death rate is great, but 1800 deaths per year is still too many. Do you feel the effort will continue somehow if these earmarked funds are dropped?

Answer: The efforts of the States will continue, however, it will probably be at a greatly reduced level of resource commitment.

FUTURES MARKETS

Question: Futures market industry officials have recently stated that farmers, faced with the possible loss of government subsidies, could replace some of that loss by using commodity futures markets as a hedge against falling farm prices. It was suggested that "if a farmer didn't have a guaranteed government price support level, he could easily accomplish the same thing in the futures markets."

Although the numbers of contracts traded in the futures markets have risen dramatically over the past 15 years, farmers' use of these markets has been minimal. It has been said that farmers tend to mistrust the markets and have made little use of them, in part, because most commodity traders buy and sell futures contracts as financial instruments with little interest in farming. Another reason cited for some of the reluctance by farmers to use futures contracts is because such contracts limit a farmer's profits on the upside. That is, if crop prices rise above the price on the futures contract, the farmer is locked into the lower contract price. Futures markets, however, have recently devised a way for farmers to get the best of both worlds: options on futures. An option is a contract that gives the buyer the right -- but not an obligation -- to buy a futures contract. If prices rise higher than the futures contract price, the option holder simply does not exercise the option. A farmer, thus, holding an option to sell a futures contract would then be free to sell his crop at the higher market price. If, on the other hand, prices fell sharply, the farmer could exercise the option and sell the crop at the contracted futures price. Does USDA share the futures market industry's optimism with regard to the role that futures markets can play in the lives of farmers if their guaranteed government price support levels are cut back?

Answer: USDA does not believe that the futures markets provides a viable marketing alternative for all farmers. Some farmers may establish a "hedge" for their grain, soybean, or cotton crops to assure themselves an acceptable predetermined price. Hedging is one of several marketing alternatives available to farmers who produce commodities traded on the major exchanges. The use of futures contracts as a marketing alternative provides a way for the farmer to "lock in" a predetermined price for his product. However, while the futures contract is in effect, the farmer is subject to margin calls if commodity prices rise; he must offset the contract before its due date to avoid making delivery, and there are commissions to be paid. For smaller farmers, the 5,000 bushel contract is not practical for a hedge. While futures contracts may provide a hedge against falling prices, they also eliminate any potential gain from price increases. The recently approved pilot program for agricultural options on futures contracts for wheat, corn, soybeans, hogs, live cattle, and cotton may be a useful marketing alternative for some farmers, but will not be useful for all farmers.

Question: If so, what is USDA doing to increase the level of knowledge, understanding, and appreciation of farmers towards futures markets? Does USDA plan to increase its efforts in this regard in the near future?

Answer: The Extension Service-USDA has funded several agreements with state Cooperative Extension Services to develop basic educational materials on marketing alternatives for farmers. These basic materials have been used in practically all states to develop specific educational programs for farmers on marketing alternatives using futures contracts as well as forward cash contracts, farm storage, delayed and deferred pricing, and sales at harvest. The objective of these programs is to acquaint the farmer with the various marketing alternatives and to plan an appropriate marketing strategy using one or more of the various alternatives. Many of these efforts have been developed and planned with the assistance of commodity industry groups and the futures industry.

Agricultural options are being introduced as an additional marketing tool for farmers. In addition, programs to help farmers understand the risk of declining prices have been developed. These programs provide a practical approach for farmers in developing their marketing plans and pricing strategies that reduce the risks of unexpected and sharp price drops and optimize their profitability from commodity marketing.

URBAN GARDENING

Question: Given the target audience of the urban gardening program what would be the impact of dropping the program now?

Answer: In FY84, there were over 164,000 participants in the program and if the funds are eliminated, two cities have indicated they would retain severely reduced programs. The other nineteen cities participating in FY85 would not have any program. The two cities could handle only three or four thousand participants.

Question: To what extent does the program contribute to better diets and incomes of the participants?

Answer: On the average, each participant in the program harvests produce valued at $120 a year which costs the U.S. government about $18 a year. While we have no data on improved diets participants not only use the fresh produce at harvest but about 35% of them preserve produce for later use. One of the observed benefits of the program is that inner city children are exposed to the various vegetables while young and may retain dietary habits that are better than their elders.

Question: You mention that significant attention has been focused on this area now, but are there enough systems in place to keep the program operating? Could the large number of volunteers who have been assisting with the program over the years keep the effort moving without Extension's assistance?

Answer: The program will cease in all but two cities and these two will operate at a very reduced level. Volunteers require a cohesive and leading entity to operate. Extension provides the cohesiveness and the technical resource and leadership for these volunteers. We do not feel that the volunteers will keep the effort moving without Extension's assistance.

Question: How many volunteers work in the effort?

Answer: About 2,000 volunteers assisted with the urban gardening program in FY84.

Question: What is the role of 4-H in this program?

Answer: 4-H encourages the participation of youth in the urban gardening program. Special 4-H activities and programs are provided for youth and families. All cities have 4-H participation. One city started the urban gardening program as a 4-H program. Overall about 25% of the participants are 4-H and youth.

Question: Could the effort be continued completely under 4-H auspices and still have major impact?

Answer: It would be very difficult for 4-H to continue this special program because of reductions in staff, materials and activities. If 4-H were to carry out the program the adult participants would be adversely affected.

Question: How many people have been affected by the program?

Answer: In FY84 there were over 164,000 participants and since its inception in FY77 and expansion in FY78 there have been a total of 1.2 million participants.

Question: What has been the value of the food produced?

Answer: In FY84, the estimated value of produce was $20 million and since its inception in FY77 the total estimated value of production is $82.6 million.

Question: Do you have any analyses that would show what the nutritional impact has been on diets of those involved?

Answer: We have not evaluated the nutritional impact on the participants diets, however, it is reasonable to assume that the diets of the participants, their families, and in some cases that of neighbors has been improved due to the consumption of more vegetables.

FARM FINANCIAL MANAGEMENT

Question: Could you please describe some of your efforts to assist farmers with financial management?

Answer: Extension programs are focussing on helping farmers to revise their financial and farm business plans and implement changes for improving their financial situation. Special emphasis is being given at the present time to assisting farmers in preparing their own individual cash flow projections and financial statements for use in making loan decisions. Extension is utilizing intensive workshops which are often followed up by one-on-one assistance and use of decisionmaking procedures including computerized procedures to assist the individual farmer in preparing his revised farm business and financial plan. A survey of 12 State Extension Services in February 1985 indicates that this type of intensive financial management assistance has been provided to over 36,000 farm families during the past 13 months. This survey also indicated that over 400,000 farm families in the 12 states surveyed had been provided with financial management guidance and information. In some states hot lines have been established for use by financially distressed farm families in obtaining help. A number of states are employing temporary personnel to provide intensive assistance on farm financial problems. Several midwestern states have received substantial amounts of additional funding from state sources to expand their programs.

Question: How do these efforts relate to other activities of the Farmers Home Administration or other groups, including the private farm management services?

Answer: Providing direct assistance to FmHA borrowers has been a primary focus of Extension financial management programs during the current period. Extension personnel are assisting FmHA borrowers to prepare cash flow projections and make applications for financial help under the current FmHA credit assistance programs. Extension and FmHA are cooperating in operation of hot lines in some states. Most State Extension Services have greatly expanded their efforts to provide training to FmHA personnel and personnel of other lending organizations. It is estimated that during the past 13 months over 3,600 non-Extension personnel of various lending and other organizations were provided with training to better assist farm families with financial problems. These Extension trained personnel provided intensive financial management assistance to over 36,000 farm families. Also Extension provides training and information for personnel of private farm management organizations.

Question: It would seem to me that the current financial straits of farmers would dictate increased assistance in the farm financial management area, not less. Do you feel enough evidence is now available to determine that the program should be dropped?

Answer: There are large numbers of farmers that need assistance in the farm financial management area based on information received from a wide range of field reports. These indicate that small states have doubled the percent of their resources devoted to financial management programs primarily through re-direction from other program areas. We estimate that in 1985 Cooperative Extension is directing approximately one-fifth of its resources to financial management programs. Several projects are just beginning to be conducted and they will significantly increase the number of farmers provided with intensive assistance. The evidence seem to indicate that Cooperative Extension's efforts will strongly continue in this area.

Question: Is there enough information and assistance available elsewhere that the program is not being effective?

Answer: There is no evidence that the Cooperative Extension financial management programs are not effective. The demand or requests for financial management assistance far exceeds the manpower that is available in the State Extension Services, lending organizations, and private farm management consulting services. Extension has been accelerating its programs to provide training in farm financial management counseling to personnel of lending organizations and other organizations such as vocational agriculture instructors.

RURAL DEVELOPMENT CENTERS

Question: I note that you have again requested no funding for the rural development centers. What has been the impact of these centers since they were initiated? What have they contributed to Extension's rural development programs that would not have been accomplished through regular program channels?

Answer: The multi-State effort of these centers is especially needed to help the land-grant system deal with rural and community problems of economic dislocation, deregulation, a decentralized federal system of government and the challenge of a technological society. Rural development issues reach across State lines, but many State Extension program resources are minimal to be able to deal with rural development issues. Under these conditions the major impacts of the Centers are to consolidate scarce resources into effective and efficient programs. In particular, the four Centers are collaborating in development of a small business management education program. The effort will assist small rural businesses that generally employ fewer than 10 people and are in towns of less then 5,000. The services and employment provided by these businesses are important in sustaining viable rural communities. The programs are already active in Iowa and Texas and will soon be extended to all States. Also, the Centers have responded to the farm, forestry, fishing and mining income reduction problems by developing programs for State assistance to help communities deal with human stress and to rethink local economic opportunities for both the public and private sectors. Research efforts at the Centers are closely aligned with Extension programs. The Centers contribute to regional research in two ways: (1) they undertake coordination of regional research requiring both a critical mass and a diversity of research skills not found at any single institution; and (2) they initiate research through "seed grants" to support new projects at their formative stage until they are eligible for other funding.

Question: Do you have any evidence that the states belonging to the respective rural development center regions can or will assume support for these centers?

Answer: There is no evidence, beyond that indicated as administrative support, that the States would support Center programs at current levels. Because of tight budgets, it will be very difficult for States to transfer funds already committed for on-going, efforts into new programs such as the programs being provided by the Centers. States in the North Central and Northeast Regions have provided Regional Research funding to the Centers in each respective Region in the amount of $25,000 per Center for administration of research projects.

Question: What will happen to the facilities and the program initiatives if funding is discontinued?

Answer: The Rural Development Centers do not possess any facilities in that they require only a small amount of office space, and that is supplied by the host institution. What would be lost to both Extension and Research would be a significant resource for responding rapidly to rural development concerns. Also, States with mutual concerns pertaining to rural development would lose their ability to assemble shared resources to develop mutual solutions to their problems.

TECHNOLOGY TRANSFER PILOT PROJECTS

Question: With reduced extension programs and funds, as well as increased use of computers and other technology on farms today, it seems to me that we need to be looking at alternative diffusion systems such as the electronic transfer of research results. What progress has been made in the technology transfer pilot projects?

Answer: The Mississippi project is concentrating on the transfer of computer technology for use in decision making and management by both small and local governments. Computer technology centers for hands on education and use by local officials and businesses have been installed in pilot counties. Local officials training is underway, and software has been developed for use in the provision of community services such as refuse vehicle routing, inventory control, and billing procedures. The Oklahoma center, working with the Oklahoma Associated Industries group, has identified and prioritized technology needs in the various industrial sectors. State-of-the-art reports are being developed assessing alternative technologies to meet these priority needs, with the expectation that market opportunities will open up for local companies to supply the needed technologies. This center also oversees four industrial incubator centers that assist small business development and it conducts annually a "New Product and Process Fair" and an "Idea to Enterprise Workshop."

Question: Have the projects completed their work, or is continued analysis needed to finalize plans for proposed innovations?

Answer: The pilot projects have successfully demonstrated that concerted efforts can improve upon the process of applying computers in local government and small business planning and management, and can help to identify and prioritize industrial technology needs and alternative solutions. That a rural technology center can also be of assistance in small business development and new product or enterprise development has also been demonstrated. The work of identifying technology needs and transferring appropriate solutions in our dynamic economy is an ongoing process, so such work is never fully completed. As demonstrations, the projects have completed the process of demonstrating effective roles for technology transfer centers.

RENEWABLE RESOURCES EXTENSION ACT (RREA)

Question: The Department has proposed eliminating the RREA, explaining that other extension funds would continue to be used to conduct educational programs for small, private, non-industrial forests and rangeland owners. How many states currently use some of their base funds for this activity?

Answer: Currently every state uses a portion of base funds to support natural resource program efforts.

Question: Given all the other extension program areas targeted for cuts, couldn't there be significant funding decreases by the States in the renewable resources area as competition increases for scarce funds?

Answer: Yes, the potential does exist. States will have to reassess their program priorities and make adjustments. It is entirely possible that some program efforts will have to be reduced or eliminated.

Question: How can we be assured that RREA interests will be given priority?

Answer: Priority issues for RREA program efforts were developed by each State with the advice and counsel of advisory groups. These advisory groups are involved on a continuing basis and provide inputs on all natural resources program efforts. States will continue to use their inputs in establishing or redefining program priorities.

Question: Even assuming that Smith-Lever, as well as state and county funds, will continue at past levels, eliminating the RREA means a 15-percent drop in funding level. With 58% of the nation's productive forests in private, non-industrial ownership, isn't this a significant cut?

Answer: Renewable Resources Extension Act funds have served as a catalyst to secure funds from both private and public agencies and organizations to support expanded program efforts. They have also been important in effecting the redirection of Smith-Lever funds. Without these funds, states may have to defer these initiatives.

QUESTIONS SUBMITTED BY SENATOR KASTEN

PEST MANAGEMENT

Question: USDA's budget proposal for fiscal year 1986 contains no funds for the pest management program previously funded under Smith-Lever title 3d. How would you evaluate the success of this program, to date and what do you think would take its place (i.e. other Federal programs, state programs, private sector, etc.) should it be eliminated?

Answer: The program has been highly successful in helping farmers to control pests more economically and effectively while maintaining crop and environmental quality. We believe it is proper for the private sector to assume the service in IPM while Extension provides educational programs to the users and providers of these services. Because of this acceptance, we are proposing elimination of the earmarked funds for this program. We feel the program can and will continue to function utilizing other resources available within the states.

EFNEP

Question: In the area of nutrition, I'm concerned that at a time when unemployment remains high in many areas and we are trying to reduce spending on many social programs, USDA has proposed the elimination of the expanded food and nutrition education program funded under Smith-Lever Title 3d. Is the proposed elimination of this program due to any perceived inefficiency or ineffectiveness in the program? Or is it motivated solely by budget considerations?

Answer: EFNEP continues to be an efficient, effective program reaching low-income families with needed nutritional education information. The reductions for our specifically earmarked programs result from prevailing fiscal contraints and are not a reflection of the effectiveness of the programs.

QUESTIONS SUBMITTED BY SENATOR HATFIELD

RURAL DEVELOPMENT CENTERS

Question: The FY 86 USDA budget request contains no monies for the four rural development centers. What is the Department's view of these centers? Have these centers been helpful or useful to the state's Extension Service rural development programs?

Answer: The four Rural Development Centers have been useful mechanisms for the State Extension Services to expand State access to community and rural development resources. Because the States have utilized the Centers as viable and functional components of their rural development efforts, they are viewed as contributing to the Cooperative Extension system. The ability to share resources and develop cooperative research initiatives has also made rural development related research more effective in all regions.

Question: Do the state Extension Directors continue to support the program of the centers? What level of financial support is provided by the Directors in each region?

Answer: The Extension Director's and State Agricultural Experiment Station Directors do support the four Centers. Each of the host state institutions provide office space and other related overhead costs and half the salary of the Director for the Center. The North Central Directors for extension and research are providing $50,000 per year for five years. The Southern Directors have gone on record as planning to provide financial support for the administrative functions of the Center. In the Northeast, five institutions are competing, along with the current host institution, to have the Center located on their campus. The West has a history of strong support.

Question: Do you have any evidence that states belonging to the respective regions can or will assume support for the rural development centers?

Answer: There is no evidence, beyond that indicated as administrative support, that the States would support Center programs at current levels. Because of tight budgets, it will be very difficult for States to transfer funds already committed for on-going efforts into new programs such as the programs being provided by the Centers. States in the North Central and Northeast Regions have provided Regional Research funding to the Centers in each respective Region in the amount of $25,000 per Center for administration of research projects.

Question: There is a recommendation from NASULGC (National Association of State Universities and Land-Grant Colleges) that the Smith-Lever support be made a 3(d) item for the rural development centers. Would this be an acceptable means of funding the centers? Do you support this approach for funding the centers?

Answer: Smith-Lever 3d funding as used in the past, has been specifically targetted to meet a national concern, to focus attention on a problem affecting several Extension Services or as "seed money" to initiate program innovation and development. Funding for the regional Rural Development Centers could be continued under these precedents. However, as stated in our proposed budget, we feel the States, at their discretion, could choose to support the centers.

RENEWABLE RESOURCES EXTENSION ACT

Question: Could you provide for the record a breakdown of the level of funding provided by the state Extension Directors in FY 85 and the activities pursued by the states?

Answer: We estimate that the States are currently providing approximately 68 percent of the funding to support natural resource program efforts. The primary activities involve the delivery of educational programs to owners, managers and users of forest, range and related natural resources. The objectives of these activities are to:

Increase landowner investments in cost efficient natural resource management practices with resulting increases in profitability.
Improve income, profits and other benefits to landowners that have a direct effect on local economies.
Increase the contribution of natural resources products and spin-offs to state and local economies.
Increase the stewardship of soil, water, vegetation and wildlife associated with forest and rangelands--long term benefits as we help protect our options for the future.
Improve returns on investments in public and private research through increased implementation.

Question: Have the funds provided for RREA in FY 84 and FY 85 served as a catalyst for additional funding by the states? Please cite some examples.

Answer: Renewable Resources Extension Act appropriations have been made available to the States for four fiscal years beginning with FY82. Since its passage in 1978 the Renewable Resources Extension Act has served as a focal point for expanding programs. Nationally, since 1980, we estimate that there has been an increase of approximately 42 percent in the amount of resources allocated to natural resources programs at the state level. This increase is the result of a number of different but related actions. A substantial portion of this increase can be attributed to the availability of the RREA funds that served to leverage or redirect existing funds. Another important factor has been the State Advisory Committees. These committees have assisted in identifying and prioritizing programming needs and opportunities at the State level. We are also beginning to see the development of joint program efforts with private sector organizations. A good example is in Alabama. A forest industry there, through a cooperative agreement, has provided the resources to supplement RREA funds for the establishment of an area forestry agent to deliver extension programs to private non-industrial forest landowners. In North Carolina an industry association has been formed for the development and delivery of an educational program to improve the efficiency of primary wood processors. These are but two examples of how these funds have served to galvanize groups across the nation in contributing to the expanded development and delivery of programs.

Question: Would the states continue to pursue these efforts without federal funding and at the same program level?

Answer: In order to maintain the current program level, states would have to either redirect resources from other programs or increase the level of state and local funds.

Question: What activities or functions were funded by the monies Congress provided for RREA in FY 84 and FY 85?

Answer: RREA funds have been used to support or expand programming in a number of different areas. Depending upon the priorities and opportunities in each State, program activities included forestland management, rangeland management, fish and waterlife management, outdoor recreation and environmental quality

and public policy. The primary audiences are the owners, managers and users of forest, range and related natural resources.

Question: Are the funds provided through the RREA, Smith-Lever 3 (b&c), and state and county matching funds adequate to meet the need of developing small, private, non-industrial forests and rangelands at the present time? For the future?

Answer: Our current estimates of needs and opportunities exceed the available resources. In developing the second 5-Year National Plan for Renewable Resources Extension Programs, the States identified continuing unmet needs and program opportunities for the future.

Question: In 1980 a five year plan was developed as required by the Renewable Resources Extension Act. Is a new five year plan being developed? If so, when will it be completed?

Answer: In March of 1984, planning commenced for the preparation of the second 5-year plan. We anticipate the second 5-year RREA plan will be transmitted to the Congress by July 1, 1985.

QUESTIONS SUBMITTED BY SENATOR CHILES

COOPERATIVE AGREEMENTS

Question: Section 1420(b) of the proposed Agricultural Adjustment Act of 1985 exempts "cooperative agreements" from the mandates of the Federal Grant and Cooperative Agreement Act of 1978. That law is codified in Title 31, Chapter 63. Between 1978 and now have any cooperative agreements been agreed to which are not consistent with the Grants Act?

Answer: Our desire to act consistently with the terms of the Federal Grant and Cooperative Agreement Act is the very reason we are seeking legislation that would permit us to use an instrument that reflects more accurately the historical relationship under which our overall research, extension, and teaching objectives are attained.

Question: Given the fact that Congress examined the issues of the Department of Agriculture's use of cooperative agreements and determined an exemption was not needed in 1978, what has changed to merit an exemption now?

Answer: One circumstance that has changed is that the Department has gained years of experience in applying the Act to its activities. Our experience has evidenced that the relationships with our cooperators is generally based on a partnership of mutual interest and contributions that serves more than one principal purpose.

NUTRITION EDUCATION ASSISTANCE

Question: How do you support reducing the nutrition education assistance to families at the same time we are decreasing the direct support and asking families to take greater responsibility for proper nutrition and health?

Answer: The decision to propose elimination of EFNEP was not based on whether the program has been a success or whether it has accomplished its mission, for we believe it has done both. The decision to eliminate the intensified outreach to low-income families through the EFNEP was based on budget considerations. We believe that it is a very desirable program which has been effective in helping low-income clientele groups. With the maintenance of the formula funds and the States ability to redirect efforts to meet high-priority needs in their areas we feel that most States will continue nutrition education programs.

IPM AND PIA

Question: Does the deletion of the IPM and pesticide impact assessment funds in the Extension program signal a shift in concern for environmental quality by the Department?

Answer: The deletion of funds does not signal a shift in concern for environmental quality by USDA. What it does reflect is the impact of overall fiscal restraints placed on the budget, which has necessitated a very difficult Departmental priority setting process.

Question: With the continued removal of agricultural chemicals from the market what is the Department's proposal for helping producers, especially those of minor crops, obtain the materials necessary to control pests and produce a crop at a highly efficient and competitive level?

Answer: The Department recognizes that producers, in order to efficiently and effectively produce crops must have accurate information and adequate materials on pest control. The proposal to eliminate earmarked funding for IPM and PIA programs in FY 1986 is not inconsistent with the Department's desire to provide the producer with this needed information. It is anticipated that the States will continue to view pest control as a priority item and direct as much of their resource base as possible to these programs. Currently, there is support within the States to provide funding for pest control programs from other State resources as well as from the private sector. Additionally, other Cooperative Extension System programs, although not earmarked for pest control, provide producers with needed information. This should enable producers, especially those of minor crops, to operate at a highly efficient and competitive level.

FINANCIAL AND RISK MANAGEMENT

Question: What is the Department doing to encourage improved financial management and risk management strategies by farmers and ranchers?

Answer: The Cooperative State Extension Services have been accelerating their emphasis and given priority to programs which assist farmers in improving their financial management. Risk management strategies are integrated into the total package of financial management strategies and concepts which are taught to farmers in Extension programs. Nationally, the Cooperative Extension System is directing approximately one-fifth of its total program resources in 1985 to respond to the farm financial crisis. It is estimated that resources devoted to these efforts have more than doubled in the past two years with some states devoting as much as 45 percent of their resources to these programs. In these Extension programs producers are assisted in understanding the alternative financial and risk management strategies which are available to them, and in analyzing the possible consequences including risk of each of the alternatives for their individual farm or ranch situation. Various specific procedures and decisionmaking tools are utilized. During the present crisis situation heavy attention is being given to assisting producers to prepare a cash flow projection and the financial statements required for farm loan applications and decisions. In connection with preparing a cash flow projection the farmer is assisted in evaluating the net income and risk potential of alternative crop and livestock production and marketing plans. Assistance and information is provided on various mechanisms for reducing risk including the use of crop insurance; forward selling through use of contract selling, hedging, or options; and changes in the combination of enterprises produced and input use. Extension programs are increasing the use of computer-decisionmaking procedures in conducting financial management programs and in assisting producers in understanding how to use these tools. More specifically ES-USDA has funded a number of special projects designed to strengthen the State Extension programs in financial and risk management. Some of these special projects are as follows: development of micro computer programs on farm financial management; development of specific computer programs to assist farmers in deciding on participation in crop insurance programs; and for the development of educational programs on agricultural commodity options.

QUESTIONS SUBMITTED BY SENATOR BUMPERS

Question: For FY 1986, the Administration proposes reducing the budget for the Extension Service by $78 million but believes $1 million within the budget will be necessary to provide information to farmers on how best to reduce assets, find alternate uses for farm property, or file bankruptcy in light of the serious credit crunch. Haven't we gotten our priorities reversed?

Answer: The $1 million you refer to is currently being used in FY85 by Extension to fund projects throughout the States dealing with the farm financial situation. This earmarked program is proposed for termination in FY 1986. However, other funds are also being used to address the problem. Nationally, the Cooperative Extension Service is directing approximately one-fifth of its total program resources in 1985 to respond to this crisis. Resources directed to these efforts have more than doubled in the past two years with some States dedicating as much as 45 percent of their resources to these programs. Cooperative Extension, with ES-USDA as a viable partner, is being responsive to the high priority concerns of the Nation's Agricultural Community.

Question: Specifically, what kind of responses has the USDA received from our 1862 institutions, 1890 colleges, and the Tuskegee Institute in light of the released proposed budget figures, and in light of your remarks that you are sure that the Federal Government will remain a viable partner within the Cooperative Extension system?

Answer: The State Extension Services have naturally expressed concern about the proposed cuts in the President's budget. The earmarked Smith-Lever 3d funds have, over the years, initiated, developed, and contributed to many successful and efficient programs. They have become an integral part of the education efforts conducted by the States. Their reaction has come in the form of letters, resolutions, phone calls, etc. to the Secretary's office, as well as Congress. However, our State cooperators understand the tremendous problem facing the Federal Government in terms of the projected budget deficit and that ES-USDA needs to be a part of the solution to that problem through showing fiscal restraint in its budget request. The Federal government will remain as a viable partner with the Cooperative Extension system in FY 1986. Our base programs, conducted through the formula funds to the 1862 and 1890 institutions and Tuskegee are proposed to be maintained at current levels. These funds will allow ES-USDA to contribute approximately one-third of the total CES resources in 1986. The matching requirement of the Smith-Lever formula funds will keep the State contributions at an appropriate level in order to insure effective program delivery.

NATIONAL AGRICULTURAL LIBRARY

QUESTIONS SUBMITTED BY SENATOR COCHRAN

INTERNATIONAL ACTIVITIES

Question: To what extent are you working with foreign libraries? What mechanisms do you use for collaborative activities? How do you get your foreign-language publications?

Answer: Currently, the National Agricultural Library (NAL) has agreements for international exchange of agriculture-related publications with over 5,000 libraries and document centers representing foreign governments, universities, and associations in 140 countries. In the past year, improved exchange arrangements and closer ties generally have been established with the Soviet Union and the Peoples Republic of China (PRC). In the case of the PRC, there has been a substantial increase in the numbers of delegations and individual librarians and scientists from that country visiting the NAL for briefings and study tours. The Library is continuing to provide, on a bilateral basis, assistance to Brazil in the development of agricultural information programs, training, document exchange, and other library-related activities. It is also involved in a joint cataloging project with Canada and a borrowing program with the British Library.

A primary focus of our current international activity is NAL implementation in its own AGRICOLA database of the controlled vocabulary developed by the Commonwealth Agricultural Bureaux (CAB). The CAB and NAL have agreed to cooperate in the future development of the CAB vocabulary, including incorporation of NAL requirements as far as possible in future editions of the vocabulary. The U.N. Food and Agriculture Organization (FAO), through its AGRIS database, provided another collaborative mechanism employed by the NAL. In support of its agreement with CAB, the NAL is working with the FAO to achieve as much compatibility as possible between the controlled vocabularies of both the FAO and CAB.

Our foreign language publications are obtained mostly through the exchange program described above, with some commercial purchasing.

Question: How extensive is our collection of foreign publications? Are these used regularly?

Answer: About 60% of the total collection is of foreign origin. Some 150,000 foreign items are received by NAL each year.

These foreign publications, of which the NAL is often the only U.S. holder, are consulted and borrowed consistently and frequently by U.S. Department of Agriculture staff, land-grant and other universities and the agricultural community throughout the U.S. for statistical, policy, research, and practical information.

Question: Last year you mentioned discussions with AID regarding providing information on agriculture to AID-supported nations. There was also discussion about your providing help to other nations as they develop their own information systems. What has happened in this regard?

Answer: Because of its resources, the National Agricultural Library is frequently in the position of acting as a research dissemination library for AID. Currently we have a cooperative agreement with the University of Maryland which arranges to provide services utilizing the NAL collections to AID-approved clients, for the most part AID missions throughout the world. We soon expect to contract directly for these services. In addition, NAL staff members routinely provide consultation to visiting representatives from AID-asisted countries, usually librarians in charge of developing information systems. These and other nations are served further by the AGRIS information system, of which the United States is a contributing member.

Question: Have you had similar discussions with the Food and Agriculture Organization (FAO), World Bank, or any other international organizations regarding assistance to libraries in other nations? Would your involvement in activities like this have benefits to your operations as well?

Answer: The NAL has frequent contact and discussion with the Food and Agriculture Organization (FAO). As the U.S. center for the international agricultural information system, the NAL contributed 50,000 new literature citations to the AGRIS/FAO database in 1984. In the rapidly growing area of aquaculture, the NAL is initiating a venture with the National Oceanic and Atmospheric Administration (NOAA) and the Aquatic and Fisheries Information Systems (ASFIS) coordinated by the FAO. The Library will provide backup document delivery service for aquaculture materials collected worldwide and processed by ASFIS. In addition, we have had discussions with the World Bank concerning the use of NAL as a depository library for the Bank's agricultural literature and the cataloging and indexing of that literature in order to make it more broadly available worldwide through international databases as well as AGRICOLA.

Our involvement in such activities will benefit our operations in terms of increased acquisition and exchange of agricultural literature, cooperative cataloging and indexing materials of foreign origin, and further development of library and information systems in third world countries. Expansion and modernization of foreign libraries would strengthen collection and dissemination of agricultural information everywhere.

FOREIGN LANGUAGE TRANSLATIONS

Question: You mentioned working with the Office of International Cooperation and Development (OICD) on translation of foreign-language publications. How much work was done? How did you determine which publications were worthy of translation?

Answer: In December 1984, following an agreement with the Office of International Cooperation and Development (OICD), NAL assumed day-to-day responsibility for receiving requests for translations, sending materials to the translation contractors in India and Pakistan, receiving the translations back, and overseeing distribution of the translations. OICD continues to handle the financial aspects of the translations program. Approximately 43,000 pages were translated under the program last year.

Requests for translations that come to NAL are screened by the requesting agency. The need for, and the potential value of, the translations is established by scientists working in the discipline in which the material is published. In some cases, NAL staff with foreign language backgrounds help determine the potential use of translations.

Question: How much value would you say these translated materials have for us? Do they bring insights and broader applications of science and technology that otherwise would not be available to us?

Answer: The materials translated in this program are very valuable. Evidence of this value includes: (1) the high number of people who have received translations in the past who continue to request translations, and (2) the increase in requests for translations that NAL has received since expanding the program to include requests from land-grant universities. In addition, once materials have been translated NAL sends copies to other translations centers, land-grant universities, and selected interested groups, and NAL makes the translations known to, and available to, anyone through listings of translations on the AGRICOLA and OCLC databases, and in the NAL Book Catalog.

The use of the translations program by the Animal and Plant Health Inspection Service (APHIS) of USDA illustrates the importance of the program. APHIS operates the Emergency Programs Information Center, the national headquarters for emergency animal disease eradication efforts in the U.S. In monitoring the worldwide incidence of animal diseases that could affect the U.S., guarding against the introduction of those diseases, and making plans to eradicate them if they should enter the U.S., APHIS relies heavily on foreign language materials which are translated through this program. Approximately 65% of translations are done for APHIS, and without the translations the materials in the Emergency Programs Information Center would be less than complete.

SOLAR ENERGY

Question: Could you please describe the solar energy demonstration being done with a grant from the Department of Energy? What is being analyzed?

Answer: The solar energy system was installed at NAL to demonstrate the practical application of this technology in supplementing the existing heating and cooling systems in a large building.

Question: What might be the benefits to the Library?

Answer: The solar system will offset energy consumption during peak periods, thus reducing fuel oil and electrical energy costs to the library.

Question: Is this likely to have a beneficial impact on your budget?

Answer: Yes, although this is an experimental project and not expected to result in a large savings, it has turned out that the library may save about 8 percent on its annual energy bill, which can help offset increasing energy costs to the library.

USER FEES

Question: What has been the impact of user fees on requests for services?

Answer: In the area of interlibrary loan, NAL has been charging a fee for providing photocopies for many years. Naturally, that fee has increased, but it is still quite reasonable and less than what many libraries charge for similar service. Some libraries have reduced their use of NAL for interlibrary loan because of that increase, but the reduction is not significant.

We are also beginning to charge for reference service to non-USDA library users who need reference assistance that takes longer than one hour or who need computer searches that exceed $25 in cost. It is too early to tell what effect that will have on requests for those services, but only a very small fraction of reference service and computer searching requests would be billable. We do expect those requests to decline somewhat as a result of this new user fee policy.

Question: Income from user fees currently reflects a very small portion of your budget. Do you see this changing in the future?

Answer: We expect a modest increase in the amount of income received from user fees. Part of this increase is due to an increase in charges for reproduction of electrostatic copy, microfilm, and microfiche, which went into effect in October 1984, and part is due to our new policy of charging for extended reference service and computer searching (see above). These fee structures are reviewed annually.

Question: Along the same line, how much change do you envision in funds made available to NAL from monies appropriated to other USDA agencies.

Answer: We do not anticipate a major change in funds made available to NAL from other agencies.

1890 INSTITUTIONS

Question: You mentioned donation of over 500 boxes of duplicate books and journals to 1890 universities and the Tuskegee Institute libraries. Approximately how many books and journals would 500 boxes represent?

Answer: On the average one box holds thirty books or twenty volumes of a journal (a volume averages 10 issues or pieces). About 70% of the boxes shipped contain journals. Thus 500 boxes equals 4,500 books and 7,000 journal volumes.

Question: On what basis were these materials distributed? Who decided which institution got what books?

Answer: All the 1890 land-grant universities and Tuskegee Institute libraries were requested to identify their interests for available publications. Based on the responses, materials surplus to NAL needs are reviewed and sent to the appropriate institution. Because of overlapping interests each institution receives a shipment in turn, roughly on a monthly basis.

Question: Do you anticipate making further distributions like this? How have you acquired these books if they are unneeded duplicates? Were they donations, or was there a need for more than one copy to be purchased at some time in the past and the need is no longer there?

Answer: We intend to provide materials to the 1890 universities as long as we have the surplus materials available. By providing such books and journals we reduce dependency on the NAL collection and make possible more rapid local service.

The unneeded publications come from a variety of sources:

1. books, such as directories, which are replaced by current versions

2. books which are superseded by later, more complete, editions

3. books and journals no longer needed by U.S.D.A. field offices or libraries, or sent by those which are closing

4. books and journals donated by U.S.D.A. retirees, widows, or other persons wishing to dispose of their private collections

5. books, journals and reports from other government agencies (including foreign sources), and from associations or other institutions with material surplus to their needs; or providing publicity copies

6. copies of titles once of very high interest and demand which are no longer needed. (Current policy allows very few such acquisitions.)

BLUE RIBBON PANEL

Question: You have outlined some impressive accomplishments on recommendations made by the Blue Ribbon Panel. What are your next priorities? What are some of the key areas you want to focus on in FY 1985 and FY 1986?

Answer: Our highest priority is to expand the library to meet its full responsibilities as a national and international source. We shall aim to revitalize and modernize library operations and services, expand user access to a greater variety of agricultural information and coordinate and strengthen a national network of agricultural libraries.

Some of the key areas, we will focus on in FY 1985 and FY 1986 will be establishment of cooperative working arrangements with other libraries and concerned private and public institutions, and development and adoption of standardized formats and procedures within the network. We anticipate extending our working agreements with land-grant university libraries, especially as regards our cooperative acquisition and cataloging programs.

Question: How long will it take for most of the recommendations to be implemented?

Answer: The library has already completed many of the specific recommendations made by the Panel. There were a large number submitted, however, covering a wide variety of subjects.

Development of an agricultural information network, for example, may take a number of years to complete, as will several other recommendations. NAL is attempting to remain current with the latest advances in automated information technology, requiring considerable funding over the next few years.

The review and development of policy statements is a continuing process, as is the steady improvement of NAL's services to its clientele. Cooperative agreements with land-grant colleges and other institutions will continue along with the ongoing public awareness effort made by the Library to promote its products and services. Many of the Panel's recommendations represent long-term and ongoing activities and we anticipate our actions in these areas will continue indefinitely.

Question: What impact will this year's budget decrease have on implementing recommendations of the Blue Ribbon Panel?

Anwer: The Blue Ribbon Panel divided its recommendations into 12 broad categories with 81 specific recommendations. The report has served as NAL's blueprint for the future. It found, among other things, that the Library needed an additional 3 million dollars a year and 50 permanent or contracted positions in order to provide basic services. The Blue Ribbon Panel recommendations were a factor in the FY 1984 and 1985 increases in NAL funding. On a comparable basis, funding increased from $9.1 million in FY 1983 to $11.4 million in FY 1985, an increase of 16 percent in constant dollars. The NAL staff years ceiling increased by 20 during this period. The proposed budget decrease will at least temporarily stop progress toward the Panel's goal. This shortfall will make it more difficult to implement fully the Panel's recommendations.

NATIONAL MEETING

Question: One of the Panel recommendations resulted in the national 2-day meeting held in Washington, D.C., for USDA field librarians and land-grant libraries. What was the purpose of this meeting, and what was accomplished?

Answer: The purpose of this meeting was to provide exchange of information and interaction among the NAL staff, the USDA field librarians, the librarians of the land-grant institutions to bring them up to date on NAL activities, to bring NAL up to date on theirs, and to allow all to anticipate further needs. Based on analysis of evaluation sheets, these purposes are regarded as having been achieved. One concrete outcome was agreement that the land-grant libraries would work with NAL to identify special agricultural collections at their institutions and share that information with other libraries.

Question: What is the function of the USDA field librarians? How many field librarians do you have and where are these people located?

Answer: The field librarians provide technical information services to USDA scientists, researchers, and technicians at laboratories and other field locations on land-grant university campuses and elsewhere across the country. The field libraries in which they work are operated under the direct supervision and support of Department agencies, principally the Agricultural Research Service and the Forest Service, which determine the staffing. There are 18 officially designated field libraries and 38 small unofficial ones or technical information centers located throughout the United States. The Director of the National Agricultural Library provides advice to these libraries and is responsible for facilitating cooperation and coordination among them. However, field librarians are not employees of NAL. The collections of all, official or not, are considered the property of NAL, for purposes of disposition. The list of field libraries appears below.

USDA AGENCY FIELD LIBRARIES

I. Official Field Libraries

OCTOBER 1984

ALABAMA
Library Technician
National Tillage Machinery Lab. Library
ARS, USDA
Post Office Box 792
Auburn, Alabama 36831-0792
FTS 534-4515 205 887-8596

CALIFORNIA
Mr. Theodor B. Yerke, Librarian
Pacific SW Forest & Range ES Library
FS, USDA
Post Office Box 245
Berkeley, California 94701
FTS 449-3173 415 486-3173

CALIFORNIA
Mr. Vince Aitro
Pacific SW Forest & Range ES Library
FS, USDA
Post Office Box 245
Berkeley, California 94701
FTS 449-3173 415 486-3173

CALIFORNIA
Ms. Rena Schonbrun, Librarian
Western Regional Research Cent. Library
ARS, USDA
Berkeley, California 94710
FTS 449-3351 415 486-3351

COLORADO
Ms. Frances J. Barney, Librarian
Rocky Mountain Forest & Range ES Library
FS, USDA
240 West Prospect Street
Fort Collins, Colorado 80526
FTS 323-1268 303 221-4390

DISTRICT OF COLUMBIA
Mr. Edward S. Billings, Acting Librarian
Office of General Counsel, Law Library
Other Agencies, USDA
Room 1406, South Bldg.
Washington, D.C. 20250
FTS 447-7751 202 447-7751

DISTRICT OF COLUMBIA
National Arboretum Library
ARS, USDA
28th & M Streets, N.W.
Washington, D.C. 20002
FTS 475-4828 202 475-4828

GEORGIA
Ms. Benna Brodsky Thompson, Librarian
Russell Research Center
ARS, USDA
Post Office Box 5677
Athens, Georgia 30613
FTS 250-3314 404 546-3314

ILLINOIS
Mr. Donald L. Blevins, Librarian
Northern Regional Research Cent. Library
ARS, USDA
1851 North University Street
Peoria, Illinois 61604
FTS 360-4337 309 685-4011

IOWA
Ms. Janice K. Eifling, Librarian
National Animal Disease Cent. Library
ARS, USDA
P.O. Box 70
Ames, Iowa 50010
FTS 649-9346 516 232-0250

LOUISIANA
Ms. Linda Korb, Librarian
Southern Forest Experiment St. Library
FS, USDA
701 Loyola Avenue, Room T-10210 USPS Bg.
New Orleans, Louisiana 70113
FTS 682-6798 504 589-6798

LOUISIANA
Ms. Dorothy B. Skau, Librarian
Southern Regional Research Cent. Library
ARS, USDA
Post Office Box 19687
New Orleans, Louisiana 70179
FTS 682-7072 504 589-7072

MINNESOTA
Mr. Floyd L. Henderson, Librarian
NC Forest Experiment Station Library
University of Minnesota
1992 Folwell Avenue, FS, USDA
St. Paul, Minnesota 55108
FTS 784-0257 612 642-5257

MISSISSIPPI
Ms. Mary A. Marshall, Library Technician
Sedimentation Laboratory Library
ARS, USDA
Post Office Box 1157
Oxford, Mississippi 38655
(601) 234-4121, Ext. 36

NEW YORK
Mr. Stephen E. Perlman, Librarian
Plum Island Animal Disease Cent. Library
ARS, USDA
Post Office Box 848
Greenport, L.I., New York 11944
FTS 649-9346 516 323 2500

PENNSYLVANIA
Ms. Laura Shoemaker, Library Technician
Northeastern Forest ES Library
FS, USDA
370 Reed Road
Broomall, Pennsylvania 19008
FTS 489-3105 215 461-3105

PENNSYLVANIA
Ms. Wendy H. Kramer, Librarian
Eastern Regional Research Center Library
ARS, USDA
600 East Mermaid Lane
Philadelphia, Pennsylvania 19118
FTS 489-6602 215 232-6602

UTAH
Ms. Elizabeth Close
Technical Information Officer
Intermountain Forst & Range ES Library
507 25th Street, FS, USDA
Ogden, Utah 84401
(801) 625-5444

WISCONSIN
Mr. Roger Scharmer, Librarian
Forest Products Laboratory Library
FS, USDA
P.O. Box 5130
Madison, Wisconsin 53705
FTS 364-5711 608 264-5711

II. Unofficial Field Libraries

ALASKA
Ms. Carol A. Ayer, Librarian
Forestry Sciences Laboratory Library
FS, USDA
Post office Box 909
Juneau, Alaska 99802
FTS 586-7301 907 586-7301

ARIZONA
Librarian
Water Conservation Laboratory Library
ARS, USDA
4331 East Broadway
Phoenix, Arizona 85040
FTS 261-4356 602 261-4356

ARIZONA
Ms. Cheryl Caraway, Sec., Librarian
Western Cotton Research Laboratory
ARS, USDA
4135 E. Broadway
Phoenix, Arizona 85040
FTS 261-3525 602 261-3525

ARIZONA
Ms. Victoria English
Carl Hayden Bee Research Lab. Library
ARS, USDA
2000 East Allen Road
Tucson, Arizona 85712
FTS 762-6380 602 629-6380

ARIZONA
Ms. E. Sue Anderson
Southwest Watershed Res. Cent. Library
ARS, USDA
2000 East Allen Road
Tucson, Arizona 85719
FTS-762-6381 602 629-6381

CALIFORNIA
Mr. Ralph T. Lewallen, Librarian
Equipment Development Center
FS, USDA
444 East Bonita Avenue
San Dimas, California 91773
FTS 793-8254 213 332 6231

COLORADO
Ms. Christine L. Evans, Sec./Libr.
Western Region, Library
ARS, USDA
Post Office Box E
Ft. Collins, Colorado 80522
FTS 323-5201 303 482-5733

DISTRICT OF COLUMBIA
Mr. G. Lynn Sprague
FS, USDA
Room 811 RP-E, Post Office Box 2417
Washington, D.C. 20013
(703) 235-20013

DISTRICT OF COLUMBIA
Ms. Constance A. Connolly, Tech Inf Spec
Engineering Staff, Tech. Inf. Cent.
FS, USDA
Post Office Box 2417
Washington, D.C. 20013
FTS 235-3111 703 235-3111

DISTRICT OF COLUMBIA
Ms. Mary B. O'Hara
Technical Information Center
FS, USDA
Room 0333, South Building
Washington, D.C. 20250
FTS 447-2050 202 447-2050

DISTRICT OF COLUMBIA
Ms. Cynthia Kenyon
ERS Ref Cent, Amer Agr Econ Doc Ctr Lib
Other Agencies, USDA
Room 147, GHI Bldg, 500 12th St. S.W.
Washington, D.C. 20250
FTS 447-4382 202 447-4382

DISTRICT OF COLUMBIA
Ms. Arlene Aikens
Food Safety & Quality Serv, Sci Admin
Other Agencies, USDA
Room 405, Annex Bldg, S.W.
Washington, D.C. 20250
FTS 447-4382 202 447-7623

DISTRICT OF COLUMBIA
Ms. Patricia A. Wetmore
Technical Inquiries, OICD
Other Agencies, USDA
4300 Auditors Bldg.
Washington, D.C. 20250
FTS 447-2893 202 447-2893

FLORIDA
Ms. Joyce S. Darr, Library Technician
Horticultural Research Lab. Library
ARS, USDA
2120 Camden Road
Orlando, Florida 32803
FTS 820-6051 305 898-6791

FLORIDA
Mr. Robert E. Berry, Director
Citrus & Subtropical Products Lab. Libr.
ARS, USDA
Post Office Box 1909
Winter Haven, Florida 33883
(813) 293-4133

GEORGIA
Ms. Virginia Rutherford
SOUTHFORNET
FS, USDA
Science Library, University of Georgia
Athens, Georgia 30602
FTS 250-2477 404 546-2477

GEORGIA
Ms. Joyce Wright, Library Technician
Stored-Product Insects Res & Dev Lab
ARS, USDA
Post Office Box 22909
Savannah, Georgia 31403
FTS 248-4408 912 233-7981

IDAHO
Head
Northwest Watershed Research Cent. Libr.
ARS, USDA
270 South Orchard
Boise, Idaho 83705
FTS 554-1363 208 334-1363

IDAHO
Ms. Aartje Smith, Librarian
Snake River Conservation Res. Ctr. Libr.
ARS, USDA
Route 1, Box 186
Kimberly, Idaho 83341
FTS 554-6578 208 432-5582

IDAHO
Office Services Supervisor
Clearwater National Forest Library
FS, USDA
12730 Highway 12
Orofino, Idaho 83544
(208) 476-4541

KANSAS
Ms. Diane LaBarbera, Librarian
Grain Marketing Research Laboratory Lib.
ARS, USDA
1515 College Ave
Manhattan, Kansas 66502
(913) 776-2760

LOUISIANA
Ms. Myrna Green
National Finance Center Library
Other Agencies, USDA
Post Office Box 60000
New Orleans, Louisiana 70160
FTS 680-5516 504 255-5516

MARYLAND
Ms. Selma Horwitz, Tech. Inf. Spec.
Beltsville Human Nutrition Research Cen.
ARS, USDA
Room 219, Bldg. 308, BARC-East
Beltsville, Maryland 20705
FTS 344-2530 301 344-2530

MARYLAND
Library Technician
Animal Science Institute Library
ARS, USDA
BARC-East, Bldg. 200, Room 100
Beltsville, Md. 20705
FTS 344-3431 301 344-3431

MARYLAND
Librarian
APHIS Plant Prot.& Quar. Trng. Ctr. Libr
Other Agencies, USDA
195 Thomas Johnson Drive
Frederick, Maryland 21701
FTS 933-1270 301 933-1270

MARYLAND
Ms. Eileen Welch, Librarian
APHIS Plant Protection & Quarantine Libr
Other Agencies, USDA
Room 628A Fed Ctr Bldg, 6505 Belcrest Rd
Hyattsville, Maryland 20782
FTS 436-5240 301 436-5240

MISSISSIPPI
Ms. Sarah S. Knight, Secretary
Forest Hydrology Laboratory Library
FS, USDA
Post Office Box 947
Oxford, Mississippi 38655
(601) 234-2744

MISSOURI
Ms.Rebecca Clearwater, Clerk/Typist
Biological Control of Insects Lab. Libr.
ARS, USDA
Post Office Box A
Columbia, Missouri 65205
FTS 276-5361 314 875-5361

MONTANA
Head
Equipment Development Center
FS, USDA
Building 1, Ft. Missoula
Missoula, Montana 59801
FTS 585-3900 406 329-3900

NEBRASKA
Ms. Patricia Sheridan, Librarian
Meat Animal Research Center Library
ARS, USDA
Post Office Box 166
Clay Center, Nebraska 68933
(402) 762-3241

OREGON
Rogue River National Forest Library
FS, USDA
Post Office Box 520
Medford, Oregon 97501
FTS 424-3601 503 776-3601

OREGON
Mr. Paul Hansen, Public Inf. Officer
Region 6, Information Office
FS, USDA
Post Office Box 3623
Portland, Oregon 97208
FTS 423-2971 503 221-2971

OREGON
Ms. Louise Parker, Public Inf. Officer
Pacific N.W. Forest & Range Exper. Stn.
FS, USDA
Post Office Box 3890
Portland, Oregon 97208
FTS 429-2078 503 231-2078

PUERTO RICO
Ms. Jo Anne Feheley
Institute of Tropical Forestry Library
FS, USDA
Post office Box AQ
Rio Piedras, Puerto Rico 00928
(809) 753-4335

VIRGINIA
Mr. Richard Dengrove, Librarian
Food & Nutrition Service Library
USDA
3101 Park Center
Alexandria, Virginia 22302
FTS 756-3808 703 756 3808

WASHINGTON
Ms. Dale Burke, Librarian
WESTFORNET-Seattle
FS, USDA
Forest Resources Lib. AQ-15, U. of Wash.
Seattle, Washington 98195
FTS 399-1076 206 543-7484

WEST VIRGINIA
Ms. Diana Donahue
Forestry Sciences Laboratory
FS, USDA
Post Office Box 152
Princeton, West Virginia 24740
FTS 924-4553 304 425-8106

WYOMING
Ms. Jimmie Ann Wideman, Inf. Recept.
Bridger-Teton National Forest Library
FS, USDA
Kemmerer Ranger District, P. O. Box 31
Kemmerer, Wyoming 83101
(307) 877-4415 or 3450

LINKAGES AMONG SYSTEMS

Question: Working with others who have data bases seems like a great way to expand services at minimal cost. When you work with others, what are the costs involved? Are there always direct charges that affect your budget, or do you at times simply exchange information for mutual benefit?

Answer: Working with others who have data bases does indeed provide an opportunity to supplement information available to USDA scientists and other users of library services.

NAL searchers of on-line data bases use many files loaded into commercial vendor systems. Use of files other than NAL's AGRICOLA data base generally ranges between 40 and 80 hours per month.

Also, our Current Awareness Literature Service (CALS) provides information to USDA scientists about newly published articles and reports relevant to their research. In addition to using AGRICOLA, we lease tapes at market rates for 11 other databases, such as Chemical Abstracts, which contain current citations of interest to our users. User agencies, primarily ARS, reimburse NAL for the royalty fees charged for each citation furnished from these tapes.

In one case, the Environmental Impact Statements data base, we obtain a subfile of records of interest to Agriculture, and incorporate it in AGRICOLA, where it is used both for current awareness and online searching.

In addition, we acquire bibliographic records produced by Agriculture Canada, and by the American Agricultural Economics Documentation Center, which are provided at no charge to us. In return, we are helping those organizations carry out their mission to disseminate information, by making these records accessible through our online database.

This mutually beneficial exchange arrangement will also apply as we develop cooperative cataloging agreements with land grant and other libraries.

Question: Are there different costs involved as you work with different types of institutions? Is there a difference between collaboration with the Arid Lands Institute and state extension offices or experiment stations, for example?

Answer: There are different costs involved as NAL works with different type institutions. The institutions which have direct responsibilities in a given subject area may fully share costs; those which see a large profit potential may pay nearly all costs; and those which have only a peripheral interest may require full cost recovery to cooperate. Differences between institutions such as Arid Lands Institute and the State Experiment Stations, except in reference to the examples cited above, do not vary much.

BREADTH OF SERVICES

Question: Who has access to your services?

Answer: NAL services are available in one way or another to anyone who needs agricultural information. Anyone above high school age, for example, may use the library's reading room and may use NAL materials in the library. Services to others who are not USDA employees may be handled by telephone and mail response to reference questions, or by lending materials (or sending photocopies in lieu of the original) to them via their local libraries. Only USDA employees may borrow materials directly. We consider NAL to be the backstop, so to speak, for non-USDA employees, with State and public libraries or the Extension Service as the first resort.

Question: To what extent are your services utilized by land-grant universities? Others?

Answer: NAL services are used to a significant degree by land-grant universities. Last year, for example, we distributed approximately 13,000 copies of our Quick Bibliographies (relatively brief bibliographies on special topics); 31% of those were sent to college and university libraries, 41% to USDA personnel, and 28% to other requesters.

Question: Is this changing as you expand your linkages with other databases and library systems? With increased automation? As there is reduced availability of USDA publications and information from other sources?

Answer: NAL services are being used more and more. One factor, of course, is increased awareness throughout the U.S. (and the world) of NAL, its resources and services. Automation has also contributed to this increase in use. For example, use of the OCLC electronic mail system for receipt of interlibrary loan requests has contributed to a 24% increase this past year in these requests.

Another factor that has significantly increased the use of NAL is the closing of USDA publication and information offices throughout the U.S. Many of the questions and requests for publication we receive were formerly handled by those offices.

Question: How much are you able to utilize university or other resources?

Answer: When appropriate, and wherever possible, we refer requests for information and documents to land-grant universities, state experiment stations, extension service offices, Regional Depository Libraries of the Federal Depository Library Program, and state and public libraries. Questions such as those from elementary or high school students can often best be handled at the State or local level through state and public libraries or the extension service. In addition, we borrowed approximately 12,000 items last year from university and other libraries to fill requests of USDA personnel for materials not owned by NAL.

Question: How many requests for information are now handled by land-grant universities that you would have had to handle in the past?

Answer: We do have formal relationships with seven land-grant universities that are part of our regional document delivery system. These institutions, for modest amounts of money, supply documents to USDA personnel throughout the country. In FY 1984, 74,000 requests from USDA staff went to these regional libraries first; they filled 57,000 of them. NAL took care of the remaining 17,000.

AUTOMATION

Question: To what extent are your operations now automated?

Answer: Many of the operations at the National Agricultural Library are automated and have been for some years. We have been inputting cataloging records into machine form since 1970. In addition to cataloging, we have automated support for indexing, acquisitions, serials control, catalog card production, and interlibrary loan. However, many of the automated systems are outdated and inefficient.

Question: What have been the benefits in terms of increased services and/or cost savings?

Answer: There have been many benefits from our automation program. A major benefit in terms of service is the availability of over 2,000,000 bibliographic records for agricultural material which NAL has cataloged, indexed, and distributed to the information community through online information services. These records identify and locate books, journals and journal articles on a variety of agriculturally related topics. Our cataloging activity has been handled faster and more efficiently through the use of the Online Computer Library Center (OCLC) utility which supports online cataloging and cooperative use of bibliographic records. The automated acquisition process enables us to order and receive materials in a more timely manner and the online interlibrary loan system speeds receipt of requests, hence making materials more readily available to the agriculture community.

Question: What are your plans regarding automation and technology?

Answer: The National Agricultural Library (NAL) is currently working toward the competitive acquisition of an integrated library system to support its internal processing more effectively. The system is expected to support cataloging, indexing, public access, serials control, acquisitions, lending, and preservation activities. It will provide online access to major library files including approximately 750,000 cataloging and indexing records.

In addition, work is underway on a number of special projects to evaluate full text databases, microcomputer technology and laser storage techniques to determine their applicability to information storage and retrieval needs. Electronic mail and electronic telefacsimile are two other technologies which are being utilized for information delivery.

Question: What are the likely costs for new systems or replacement equipment?

Answer: The expected cost of the integrated library system is approximately $400,000 for lease/purchase.

Question: In your explanatory notes you talk about cost savings associated with the creation of searchable full text databases from photocomposition tapes and their being used to print USDA publications. What has been your analysis in this regard?

Answer: This project began in October 1984 and is being done under a cooperative agreement with the University of Illinois. Since it does not end until September 1985, it is too early to have any real data. The premise on which the project is based, however, is that once a document has been keyed into a computer to create a publication, that machine-readable file should be useful for more than just one purpose. Consequently, you only have to pay for the keying one time. Cost savings are there, we just do not yet know the extent of those savings.

The photocomposition tape of one USDA document has been mounted on a computer at the University of Illinois for experimental purposes. Researchers are now manipulating that database to determine how much work (and therefore expense) is involved in making it useful for full text searching.

Question: Are there significant cost reductions because part of the input work is already done?

Answer: We expect significant cost reductions for that reason. But some of the apparent cost savings will be offset by the cost of converting the file to a usable format for full text searching.

Question: How would costs using the photocomposition tapes differ from producing the databases without this resource?

Answer: If we cannot use the photocomposition tapes for this purpose (or use a word processing file that may have been used to create the photocomposition tape) then the document would have to be re-keyed and re-checked for accuracy--a very labor-intensive and expensive activity.

Question: To what extent are full text databases now in use? Is this an innovation?

Answer: The first full text database was made available online several years ago. Each year more and more such databases are being created and made available, and database vendors such as the Bibliographic Retrieval Service and Dialog are constantly adding other such databases to their systems. They, along with many other researchers, are seeking ways to improve searching capabilities in these databases and ways of reducing the cost of creating, maintaining and searching them.

The use of such databases is expensive, but their use enables the gathering of information in ways that are impractical, or even impossible, using traditional print sources, and in a much more timely way. NAL currently uses full text databases from Nexis and from Dun and Bradstreet to support the work of USDA economists and administrators, and other USDA personnel.

SUBCOMMITTEE RECESS

Senator COCHRAN. Our next hearing is going to be held on Thursday, March 14, in this same room, beginning at 10 a.m. At that time we will hear from representatives of the Federal Crop Insurance Corporation and the Rural Electrification Administration. Until Thursday, the hearing will be recessed.

[Whereupon, at 12:07 p.m., Tuesday, March 12, the subcommittee was recessed, to reconvene at 10 a.m., Thursday, March 14.]

AGRICULTURE, RURAL DEVELOPMENT, AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 1986

THURSDAY, MARCH 14, 1985

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, DC.

The subcommittee met at 10 a.m., in room SD–124, Dirksen Senate Office Building, Hon. Thad Cochran (chairman) presiding.

Present: Senators Cochran, Burdick, and Andrews.

DEPARTMENT OF AGRICULTURE

FEDERAL CROP INSURANCE CORPORATION

STATEMENTS OF:

FRANK W. NAYLOR, UNDER SECRETARY FOR SMALL COMMUNITY AND RURAL DEVELOPMENT

MERRITT W. SPRAGUE, MANAGER, FEDERAL CROP INSURANCE CORPORATION

ACCOMPANIED BY:

EDWARD D. HEWS, DEPUTY MANAGER, FEDERAL CROP INSURANCE CORPORATION

ROBERT SHERMAN, BUDGET OFFICER, DEPARTMENT OF AGRICULTURE

OPENING REMARKS

Senator COCHRAN. The subcommittee will please come to order. This morning we have in our hearing, officials from the Federal Crop Insurance Corporation and the Rural Electrification Administration, which come under the jurisdiction of the Under Secretary for Small Community and Rural Development of the Department of Agriculture.

The Federal Crop Insurance Corporation is a wholly owned, Government corporation which provides a cost-sharing insurance program for our agricultural producers to protect their investment against unavoidable risks.

The REA makes direct loans and guarantees loans made primarily by the Federal Financing Bank. The electrification program provides service to farms and other rural establishments and the telephone program furnishes and improves telephone service in rural areas.

We welcome to the subcommittee as the administration's lead witness, Under Secretary Frank Naylor, who is accompanied by Merritt Sprague, Manager of the Federal Crop Insurance Corporation, and Harold Hunter, Administrator of the Rural Electrification Administration. Bob Sherman is here from the budget office.

I appreciate very much your attendance at the hearing. We have prepared statements from the agencies which we thank you for. They will be made a part of the record in full.

Mr. Secretary, at this point, if you would like to make any opening remarks or comments, please feel free to do so. We can then turn to the agencies for their presentations.

COMMENTS BY MR. NAYLOR

Mr. NAYLOR. Mr. Chairman, as always, it is a pleasure to appear before your committee and have an opportunity to review with you and discuss in some detail the proposals of the administration for the 1986 budget year.

The Federal Crop Insurance Corporation, which is the first of the agencies to be reviewed, has made some major strides in the last several years in working to become the Government's principal disaster assistance agency for the American farmer.

With the involvement of the private sector, we have seen a substantial growth, and we expect that growth to continue. We expect it to become what it was hoped it would be, a viable and important source of support for American agriculture.

I have with me today Merritt Sprague, who is the Administrator of the Agency and the Deputy Administrator, Ed Hews. They are prepared to review the rather significant and substantial changes that we project over the next year and the several years following.

With your permission, Mr. Chairman, I will turn over the presentation to Mr. Sprague to review the highlights of the program changes that we expect to be making for the benefit of the committee.

PREPARED STATEMENT

Senator COCHRAN. Thank you very much, Mr. Secretary. Mr. Sprague, welcome. You may proceed.

[The statement of Mr. Sprague follows:]

STATEMENT OF MERRITT W. SPRAGUE

It is my pleasure to appear before this Subcommittee to present the 1986 Budget for the Federal Crop Insurance Corporation.

The Federal Crop Insurance Corporation is submitting for fiscal year 1986 budget proposals under proposed legislation and under existing legislation.

Under proposed legislation, Federal costs for administrative expenses and for premium subsidy will be phased out over a five-year period beginning in 1986. Under existing legislation, federal funding would continue to cover the administrative and premium subsidy expenses of the program.

Under both proposals, program participation is estimated to increase from 44 million acres in 1984 to 54 million acres in 1985, and to 63 million acres in 1986.

We are also requesting in both proposals a supplemental in fiscal year 1985 for the balance of the subscription to capital stock of $50 million. Extreme weather conditions of 1984 resulted in a large cash drain on the Corporation's revolving fund. The issuance of the remaining capital stock authorization is therefore necessary to meet contractual commitments to insured producers. Projections of continued high losses in 1985 may require additional supplemental funding authority. We are monitoring the situation closely and will recommend appropriate action.

I will discuss in detail the budget request under existing legislation.

Fiscal Year 1986 Budget Request

Our budget request for fiscal year 1986 under existing legislation is as follows:

$239,234,000 for Administrative and Operating Expenses to fund the expanded crop insurance program. About $115.2 million of this amount will be required for contracts with reinsured companies, and approximately $55.1 million for commissions paid under Agency Sales and Service Agreements and loss adjustment costs. Also included in the request is $12.8 million to be reimbursed to ASCS. These amounts total $183.1 million, and account for almost 77 percent of the Corporation's total request for administrative expenses.

$135,000,000 for premium subsidy for the 1985 crop year. This amount represents 30 percent of the expected premium, up to the 65 percent level of coverage, as authorized by the Federal Crop Insurance Act, as amended in 1980.

The $135 million would provide for maximum expansion of the crop insurance program to an estimated 54 million insured acres in crop year 1985.

This represents a total budget request for fiscal year 1986 of $374,234,000 for on-going programs. The total for fiscal year 1986 is $63,732,000 more than the total request for 1985 appropriations for on-going programs.

Administrative and Operating Expenses

The appropriation request for Administrative and Operating Expenses for fiscal year 1986 will allow the Corporation to continue expansion of the crop insurance program. Resources are requested to expand insurance coverage from the crop year 1984 level of 44 million insured acres to 54 million insured acres in crop year 1985, and to 63.1 million insured acres in crop year 1986.

The major portion of the budget will be used to support private sector delivery systems. Two basic forms of delivery are currently in place: reinsured companies, which provide all of the fundamental insurance services and share underwriting gains and losses; and master marketers, operating under general agency sales and service contracts, which sell and service crop insurance written on FCIC paper.

Of the amount requested for Administrative and Operating Expense, over $170 million will be used for master marketing commissions, loss adjustment costs, and reinsurance administrative expense. About $12.8 million is included as reimbursement to ASCS. The remaining $56.1 million will be used for the expenses of field actuarial offices, field operations offices, field staff, Kansas City Operations offices, which includes computer support, and the Headquarters staff.

In total, our fiscal year 1986 request for Administrative and Operating Expenses represents an increase of $38.7 million over the fiscal year 1985 appropriations.

Premium Subsidy

The fiscal year 1986 appropriation request of $135 million for premium subsidies represents an increase of $25 million over the fiscal year 1985 appropriation. This increase is based on our estimate that the total premium on which the subsidy is calculated will increase from $440 million in crop year 1984 to $540 million in crop year 1985.

Reimbursement for Prior Year Costs

The Federal Crop Insurance Act also provides for reimbursement to the Corporation for agents' commission obligations and loss adjustment costs incurred during prior years, but not previously reimbursed. Since all prior year obligations have been reimbursed by appropriation, no amount is requested to be restored in fiscal year 1986. However, in fiscal year 1985, the Corporation will use $21 million from premium income to pay agents' commissions, and will request an appropriation for restoration in subsequent years.

F.Y. 1986 Budget Request - Proposed Legislation

As I have indicated the Corporation is also submitting a fiscal year 1986 budget request under proposed legislation.

Under this proposed budget, the crop year 1986 program levels of $600 million premium and 63.1 million insured acres are the same as those under existing legislation. The method of funding the crop insurance program, however, is not the same.

Legislation will be proposed to increase the producer's share of premium cost in order to phase out Federal payment of administrative expenses and premium subsidy. The 1986 appropriation is the first year of a five-year phase-out of all Federal operating subsidies. The objective is to convert the Corporation to a fully self-supported reinsurance company with a strong regulatory capability.

Administrative and Operating Expenses total $164,257,000 by direct appropriation. The balance required of $74,977,000 will be paid from premium income.

Federal premium subsidy of $92,048,000 will be required for 1986 under this proposal. This amount assumes the producer's share of the premium cost will be increased beginning in 1986.

I would now like to review our accomplishments for the past year, and discuss our current plans and projections.

Crop Year 1984 Experience

Federal Crop Insurance is intended to become the primary form of federal disaster protection for farmers, and eventually replace the many overlapping farm disaster programs. Since enactment of the new legislation in 1980, insurance has expanded from 1,676 counties to over 3,000 counties. County programs have increased almost 300 percent, from 4,629 in 1980 to 17,874 in 1984. Thus, crop insurance is now available in all agricultural counties on the acreage previously covered by disaster payments.

Acres insured and insurance-in-force have also increased substantially. In 1980, acres insured were 26.6 million compared with 44 million for the 1984 crop year. Insurance-in-force has also increased for the same period, from $3 billion in 1980 to $6.6 billion in 1984.

The current estimates of crop year 1984 experience for the combined efforts of the public and private sector show total premium amounting to about $441 million, and total indemnities of about $638 million, for a combined loss ratio of 1.45.

The budget submission for the crop year 1984 insurance operations reflects premiums for the reinsurance share at about $257 million, and indemnities at $290 million, for a loss ratio of 1.13, with the remaining premiums of $181 million handled by master marketers. The indemnities are estimated at $254 million, which results in a loss ratio of 1.40. However, more recent reports show premiums for reinsurance operations at $265 million with indemnities at

$378 million, for a loss ratio of 1.43, and $176 million in premiums handled by master marketers with indemnities currently estimated at $260 million, which results in a loss ratio of 1.48.

There have been several program and administrative changes for crop year 1984 made by the Corporation which should improve the crop insurance program.

Analysis and preparation for expansion in 1,000 additional county programs was conducted.

The Cotton and Rice Coverage Plan (CRCP), a prototype of the Actual Production History (APH) Program, was implemented.

Analysis and preparation for Actual Production History in four crops -- corn, grain sorghum, tobacco, and peanuts for the 1985 crop year was completed.

Significant progress was made in updating the Actuarial Data Base.

The report by the actuarial consultant, Milliman and Robertson, was completed, and recommendations are being implemented.

A compliance review system of commercial insurance companies reinsured by FCIC was implemented.

Financial standards were established for commercial insurance companies being evaluated for reinsurance contracts with FCIC.

The first reviews of reinsured company loss adjustment procedures were conducted in Texas and California.

A revised Sales and Service Agreement for Master Marketers was signed, effective until 1986.

Significant progress was made in establishing a working relationship between FCIC and the USDA Cooperative Extension Service including the establishment of the ES-FCIC Advisory Committee.

Nationwide training of ASCS field personnel in the Actual Production History Program was conducted by FCIC

An Operations Automation Study was begun. This study will examine improved paper flow, data processing and communication networks.

Significant achievements were made in automating office information systems, establishing microcomputer use and telecommunications.

Efficiency was increased by realigning FCIC districts by premium income.

The state of Arkansas was transferred to the jurisdiction of the Nashville Field Office. The virtual absence of complaints from Arkansas producers indicates that the objective of improving service was achieved.

Crop Year 1985 Projections

The fiscal year 1985 appropriations have permitted the Corporation to continue to expand the Federal Crop Insurance Program. In crop year 1985, insurance is offered on 38 major crops, on 18,881 county programs in 49 states and is available in virtually every agricultural county in the United States. Cranberries and pima cotton were offered through Multiple Peril Crop Insurance Companies (MPCI) under special arrangement where the private sector developed the actuarial structure, rates and coverages with the approval of FCIC's Actuarial Division. Insured acres are estimated at 54 million for the current crop year, and premium is expected to be about $540 million.

The Corporation has also made several program and administrative changes for crop year 1985 which should improve the crop insurance program.

Initiate analysis and statistical development for the Actual Production History (APH) Program for individualized coverage for all remaining crops by 1987.

Implement the APH program for individualized coverage on tobacco, peanuts, corn and grain sorghum.

Establish a data base, data base management system, and analytical systems to support a computerized ratemaking system.

Refine procedures and follow-up systems for 30 day document processing.

Develop a financial information reporting system on performance data for commercial companies having reinsurance contracts with FCIC.

Comprehensive review and study of the risk-sharing and reimbursement options for the 1986 Reinsurance Agreement.

Implement a tracking system for updates and resolution of investigations, audits and whistleblower cases.

Enhance public relations program to further expand and encourage state legislators to provide state subsidies for crop insurance premiums - Alaska was the first state to enact legislation.

Implement a public awareness program through local FFA and 4-H organization leaders.

Review the flow of cash from insureds through Master Marketing Agencies to FCIC.

Establish a pilot program with a collection agency to enhance debt collection.

Sixty-three percent of the Operations Automation Study initiated in 1984 is expected to be completed during F.Y. 85. This includes the development of operations procedure and computer system design programming, training, and first phase of operations implementation.

Review of the Master Marketers' operations to assure compliance with the Sales and Service Agreement.

Exhibits

I would like to have two exhibits inserted in the record. The first exhibit is a revised table of the 1984 crop year experience, by commodity, as of February 1985, and reflects the changes that have taken place since the submission of the President's Budget.

The second set of exhibits (Exhibits II(a), II(b), and II(c)) shows loss ratios during the 37 years of our existence. The crop insurance program has had 18 years in which premiums have exceeded indemnities and 19 years in which the reverse has been true. The 37-year loss ratio is 1.27.

This concludes my statement. We will be glad to answer any questions or furnish any additional information you may desire.

EXHIBIT I

ESTIMATED CROP INSURANCE EXPERIENCE - 1984
As of February 1985

ALL PROGRAMS
(Dollars in thousands)

	Amount of Premium (a)			Amount of Indemnities			Loss Ratio		
	Government Operations	Reinsurance Operations	Total	Government Operations	Reinsurance Operations	Total	Government Operations	Reinsurance Operations	Total
Wheat	35,639	38,552	74,191	55,740	64.523	120,263	1.57	1.67	1.62
Cotton	6,402	30,040	36,442	8,230	52,570	60,300	1.29	1.75	1.67
Combined Crop	398	0	398	42	0	42	0.11	0.00	0.11
Tobacco	14,566	10,248	24,814	9,522	6,149	15,671	0.65	0.60	0.63
Corn	37,140	68,640	105,780	39,824	65,208	105,032	1.07	0.95	0.99
Flax	196	171	367	173	144	317	0.88	0.84	0.86
Bean	958	2,514	3,472	1,121	2,791	3,912	1.17	1.11	1.13
Citrus	2,671	698	3,369	7,366	2,820	10.136	2.76	4.04	3.02
Soybean	47,505	54,380	101,885	75,793	92,446	168,239	1.60	1.70	1.65
Barley	5,298	6,296	11,594	10.553	14,733	25,286	1.99	2.34	2.18
Peach	575	737	1,312	740	369	1,109	1.29	0.50	0.85
Grain Sorghum	4.806	10,867	15,673	11,731	24,994	36,725	2.44	2.30	2.34
Oat	731	659	1,390	824	975	1,799	1.13	1.48	1.29
Rice	641	598	1,239	1,049	1,058	2,107	1.64	1.77	1.70
Raisin	478	11,409	11,887	304	8,557	8,861	0.64	0.75	0.75
Pea	301	313	614	344	221	565	1.14	0.71	0.92
Peanut	9,266	7,821	17,087	8,825	6,648	15,473	0.95	0.85	0.91
Potato	1,227	1,327	2,554	3,397	2.349	5,746	2.77	1.77	2.25
Apple	658	360	1,018	736	968	1,704	1.12	2.69	1.67
Tomato	103	3,224	3,327	206	3,708	3,914	2.00	1.15	1.18
Sugar Beet	678	1,025	1.703	420	410	830	0.62	0.40	0.49
Grape	438	3.193	3,631	310	3,991	4,301	0.71	1.25	1.18
Sugarcane	349	295	644	167	148	315	0.48	0.50	0.49
P. Rico Reins.	*	2,151	2.151	*	1,936	1,936	*	0.90	0.90
Sunflower	2,195	2,617	4,812	3,665	3,899	7,564	1.67	1.49	1.57
Forage Seed.	5	2	7	2	2	4	0.37	1.07	0.57
Sweet Corn	92	85	177	45	34	79	0.48	0.40	0.45
Forage Prod.	4	6	10	0	4	4	0.00	0.74	0.40
Rye	20	15	35	6	7	13	0.30	0.49	0.37
Almond	557	2,950	3,507	4	30	34	0.01	0.01	0.01
Prev Planting	5	0	5	2	0	2	0.45	0.00	0.40
Hybrid Seed	402	1,065	1,467	916	1,970	2,886	2.28	1.85	1.97
Citrus Tree	544	290	834	12,448	6,308	18,756	22.88	21.75	22.49
Table Grape	159	1,456	1,615	232	5,460	5,692	1.46	3.75	3.52
Pepper	211	183	394	247	296	543	1.17	1.62	1.38
Popcorn	113	296	409	450	1,125	1,575	3.99	3.80	3.85
Fresh Tomato	646	257	903	4,565	961	5.526	7.07	3.74	6.12
Walnut	23	125	148	1	103	104	0.04	0.82	0.70
Cotton, ELS	0	14	14	0	21	21	0.00	1.50	1.50
Cranberry	0	121	121	0	64	64	0.00	0.53	0.53
ALL PROGRAMS	176,000	265,000	441,000	260,000	378,000	638,000	1.48	1.43	1.45

(a) Includes government premium subsidy.
* No program.

United States Department of Agriculture

EXHIBIT II(a)
Page 1 of 2

FEDERAL CROP INSURANCE CORPORATION
TOTAL INSURANCE OPERATIONS

LOSS RATIOS - 1948-1968
CROP YEAR

PROGRAM	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968
Wheat	0.58	1.43	0.52	0.52	0.85	1.25	1.42	1.26	1.09	0.60	0.16	0.68	0.23	1.09	0.38	0.95	0.57	1.24	0.54	1.14	1.01
Cotton	0.43	1.97	2.81	0.92	0.44	1.05	0.56	0.84	0.67	0.54	0.25	0.45	0.52	1.38	1.24	0.70	0.46	0.84	2.29	3.85	1.92
Combined Crop	0.06	0.16	0.94	1.65	2.33	0.91	1.50	1.42	1.28	0.83	0.36	1.70	0.27	1.23	0.76	0.45	0.45	0.07	0.41	2.12	0.10
Tobacco	0.48	0.66	0.61	0.49	0.79	1.90	0.89	0.40	0.28	0.34	0.19	0.38	0.38	0.29	0.79	0.62	0.31	0.58	0.59	0.38	0.54
Corn	0.17	0.16	1.26	2.38	0.25	0.17	0.56	1.47	3.35	0.46	0.56	0.87	1.45	0.23	1.52	0.41	1.67	2.04	0.45	0.94	0.66
Flax	0.51	0.62	0.42	0.49	0.79	0.95	0.77	0.77	0.54	2.46	0.45	1.64	0.47	1.27	0.65	0.79	1.41	0.40	0.96	0.79	0.36
Bean	0.29	0.64	1.84	3.14	0.55	0.62	1.60	0.66	0.96	1.03	0.32	0.91	0.59	0.54	2.03	0.61	1.58	2.29	1.03	0.64	1.35
Citrus				0.00	0.04	0.00	0.00	0.03	0.22	7.25	0.15	0.24	2.11	2.36	9.25	0.03	0.45	1.11	0.29	2.75	2.21
Soybean								0.73	0.74	0.65	0.36	0.44	0.56	0.54	0.67	0.98	1.02	0.95	0.58	1.27	0.78
Barley									0.39	0.35	0.39	1.08	0.69	1.53	0.81	1.05	0.53	0.24	0.42	0.62	0.43
Peach										0.50	0.77	1.13	0.76	0.63	1.81	1.03	3.50	0.54	0.95	2.29	0.24
Grain Sorghum												0.27	0.28	0.70	0.39	0.75	1.03	0.50	0.42	0.76	1.01
Oat												0.99	0.65	1.26	0.47	0.60	0.69	0.22	0.60	0.48	0.39
Rice													0.58	1.03	0.64	0.00	0.68	0.43	0.34	0.31	0.77
Raisin														0.01	0.00	3.64	0.02	0.07	0.07	0.06	0.03
Pea															3.08	0.53	2.64	0.87	2.69	0.76	2.77
Peanut															0.35	0.77	1.31	0.26	0.25	0.55	0.53
Potato															2.17	2.21	3.98	1.08	2.27	1.05	1.38
Apple																0.35	0.92	0.37	1.91	0.91	3.33
Cherry																4.84	0.21	1.66	4.33	*	*
Tomato																0.41	0.25	0.27	1.01	0.64	0.97
Safflower																	3.02	7.42	2.94	*	*
Sugar Beet																		0.29	0.58	0.60	0.64
Tung Nut																		0.08	0.32	0.15	4.92
Grape																				1.02	1.25
Sugarcane																				0.07	0.20
P. Rico Reins																					0.05
Sunflower																					
Forage Seed.																					
Sweet Corn																					
Forage Prod.																					
Rye																					
Almond																					
Prev Planting																					
Hybrid Seed																					
Citrus Tree																					
Table Grape																					
Pepper																					
Popcorn																					
Fresh Tomato																					
Walnut																					
Cotton, ELS																					
Cranberry																					
ALL PROGRAMS	0.53	1.31	0.91	1.12	0.97	1.15	1.24	1.14	1.26	0.69	0.26	0.77	0.58	0.89	1.10	0.77	0.90	1.13	0.68	1.27	1.05

* No Program.

United States Department of Agriculture

EXHIBIT II(a)
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FEDERAL CROP INSURANCE CORPORATION
TOTAL INSURANCE OPERATIONS

LOSS RATIOS - 1969-1984
CROP YEAR

PROGRAM	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1948-84
Wheat	0.74	0.46	0.42	0.42	0.83	0.97	0.51	0.94	1.47	0.48	0.98	2.85	0.97	0.88	0.88	1.62					1.07
Cotton	2.61	1.33	1.67	0.97	0.46	2.24	3.22	3.57	0.47	1.13	1.48	1.81	1.11	1.98	1.80	1.67					1.61
Combined Crop	0.06	0.21	0.14	0.29	1.02	1.06	0.61	0.46	1.06	0.08	0.07	6.96	0.17	0.32	0.62	0.11					1.13
Tobacco	1.06	0.58	0.39	0.36	0.67	0.29	1.06	0.91	2.98	0.42	1.11	2.59	0.89	1.00	2.95	0.63					1.16
Corn	0.57	1.17	0.37	0.25	0.25	2.30	1.16	2.40	1.86	0.20	0.15	1.26	0.58	0.53	2.70	0.99					1.03
Flax	0.27	0.93	0.69	0.70	1.24	1.94	0.98	2.53	1.44	0.65	0.53	1.97	0.89	1.22	0.88	0.86					0.90
Bean	1.18	0.81	0.41	0.52	0.91	0.13	0.82	0.68	1.01	0.90	0.34	0.71	1.01	2.98	1.33	1.13					1.41
Citrus	1.75	3.11	0.63	1.23	0.44	0.42	0.37	2.66	0.28	1.01	0.50	1.94	2.23	0.08	0.00	3.02					1.46
Soybean	0.89	0.59	0.72	0.79	0.31	1.01	0.39	1.11	0.30	0.35	0.38	2.11	1.80	2.06	2.45	1.65					1.71
Barley	0.31	0.66	0.30	0.61	0.86	1.53	1.07	1.31	0.99	0.40	0.56	2.39	0.82	0.62	0.85	2.18					1.10
Peach	0.41	1.19	1.77	2.18	2.41	1.14	1.42	0.46	0.50	2.17	0.15	0.62	0.35	3.59	2.98	0.85					1.39
Grain Sorghum	0.41	0.96	0.58	0.87	0.23	1.63	0.52	0.91	0.47	1.46	0.62	2.96	0.93	1.15	2.00	2.34					1.42
Oat	0.43	0.47	0.25	1.23	1.03	1.05	0.53	2.99	0.56	0.53	0.60	2.44	1.42	0.59	0.77	1.29					0.93
Rice	0.44	0.07	0.51	0.57	0.63	0.41	0.23	0.54	0.72	0.76	1.55	4.58	1.86	3.50	4.13	1.70					2.44
Raisin	0.30	0.00	0.00	0.01	0.02	0.00	0.20	11.66	0.02	12.13	0.00	0.00	0.01	6.29	1.14	0.75					1.51
Pea	0.72	0.98	0.59	0.52	1.54	0.78	0.83	0.80	2.93	0.84	0.63	0.47	0.68	0.69	0.96	0.92					1.16
Peanut	0.63	0.22	2.16	0.53	0.21	0.32	0.32	0.49	0.57	0.28	0.67	8.22	0.62	0.80	3.01	0.91					1.32
Potato	1.54	*	*	*	*	*	*	*	*	0.00	0.14	0.00	1.36	1.30	2.72	2.25					2.19
Apple	0.24	1.65	1.06	3.25	1.31	1.48	0.18	1.38	1.93	1.07	0.80	0.90	1.54	1.86	1.58	1.67					1.40
Cherry	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*					2.61
Tomato	1.79	0.30	0.40	0.84	0.97	2.38	1.93	0.19	0.79	0.29	1.44	0.23	0.39	2.56	1.37	1.18					1.30
Safflower	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*					3.93
Sugar Beet	1.28	1.32	0.56	1.01	0.77	1.13	1.90	0.59	0.33	0.20	0.39	0.72	0.54	0.41	0.77	0.49					0.68
Tung Nut	0.38	2.27	*	*	*	*	*	*	*	*	*	*	*	*	*	*					0.75
Grape	2.59	0.77	0.00	4.10	1.55	0.11	0.10	0.25	3.85	0.20	0.19	0.17	0.84	2.28	2.25	1.18					1.66
Sugarcane	0.08	0.22	0.89	0.94	2.79	0.50	0.46	0.64	0.84	1.57	0.70	1.37	1.22	0.80	4.93	0.49					1.62
P. Rico Reins	0.05	0.16	0.01	0.08	*	*	*	*	*	0.24	*	*	*	*	0.38	0.90					0.58
Sunflower								0.35	0.12	0.12	0.43	1.83	0.72	1.40	1.08	1.57					1.14
Forage Seed.										2.39	4.57	5.90	4.67	2.70	1.00	0.57					3.35
Sweet Corn										0.57	0.54	0.72	1.12	0.51	1.37	0.45					0.73
Forage Prod.											0.68	3.41	3.31	2.12	2.86	0.40					2.11
Rye												2.88	0.00	0.48	0.41	0.37					0.42
Almond													0.01	0.75	3.45	0.01					1.04
Prev Planting														5.57	1.31	0.40					4.94
Hybrid Seed															13.23	1.97					3.69
Citrus Tree															0.00	22.49					11.79
Table Grape																3.52					3.52
Pepper																1.38					1.38
Popcorn																3.85					3.85
Fresh Tomato																6.12					6.12
Walnut																0.70					0.70
Cotton, ELS																1.50					1.50
Cranberry																0.53					0.53
ALL PROGRAMS	1.08	0.94	0.60	0.60	0.60	1.17	0.86	1.57	1.46	0.50	0.65	2.26	1.07	1.35	2.01	1.45 (1)					1.27

* No Program.

(1) The crop year 1984 ratios are based on estimates as of February 1985.

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FEDERAL CROP INSURANCE CORPORATION
GOVERNMENT OPERATIONS

LOSS RATIOS - 1948-1968

PROGRAM	CROP YEAR																				
	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968
Wheat	0.58	1.43	0.52	0.52	0.85	1.25	1.42	1.26	1.09	0.60	0.16	0.68	0.23	1.09	0.38	0.95	0.57	1.24	0.54	1.14	1.01
Cotton	0.43	1.97	2.81	0.82	0.44	1.05	0.56	0.84	0.67	0.54	0.25	0.45	0.52	1.38	1.24	0.70	0.46	0.84	2.29	3.85	1.92
Combined Crop	0.06	0.16	0.94	1.65	2.33	0.91	1.50	1.42	1.28	0.83	0.36	1.70	0.27	1.23	0.76	0.45	0.45	0.07	0.41	2.12	0.10
Tobacco	0.48	0.66	0.61	0.49	0.79	1.90	0.89	0.40	0.28	0.34	0.19	0.38	0.38	0.29	0.79	0.62	0.31	0.58	0.59	0.38	0.54
Corn	0.17	0.16	1.26	2.38	0.25	0.17	0.56	1.47	3.35	0.46	0.56	0.87	1.45	0.23	1.52	0.41	1.67	2.04	0.45	0.94	0.66
Flax	0.51	0.62	0.42	0.49	0.79	0.95	0.77	0.77	0.54	2.46	0.45	1.64	0.47	1.27	0.65	0.79	1.41	0.40	0.96	0.79	0.36
Bean	0.29	0.64	1.84	3.14	0.55	0.62	1.60	0.66	0.96	1.03	0.32	0.91	0.59	0.54	2.03	0.61	1.58	2.29	1.03	0.64	1.35
Citrus				0.00	0.04	0.00	0.00	0.03	0.22	7.25	0.15	0.24	2.11	2.36	9.25	0.03	0.45	1.11	0.29	2.75	2.21
Soybean								0.73	0.74	0.65	0.36	0.44	0.56	0.54	0.67	0.98	1.02	0.95	0.58	1.27	0.78
Barley									0.39	0.35	0.39	1.08	0.69	1.53	0.81	1.05	0.53	0.24	0.42	0.62	0.43
Peach										0.50	0.77	1.13	0.76	0.63	1.81	1.03	3.50	0.54	0.95	2.29	0.24
Grain Sorghum												0.27	0.28	0.70	0.39	0.75	1.03	0.50	0.42	0.76	1.01
Oat												0.99	0.65	1.26	0.47	0.60	0.69	0.22	0.60	0.48	0.39
Rice													0.58	1.03	0.64	0.00	0.68	0.43	0.34	0.31	0.77
Raisin														0.01	0.00	3.64	0.02	0.07	0.07	0.06	0.03
Pea															3.08	0.53	2.64	0.87	2.69	0.76-	2.77
Peanut															0.35	0.77	1.31	0.26	0.25	0.55	0.53
Potato															2.17	2.21	3.98	1.08	2.27	1.05	1.38
Apple																0.35	0.92	0.37	1.91	0.91	3.33
Cherry																4.84	0.21	1.66	4.33	*	*
Tomato																0.41	0.25	0.27	1.81	0.64	0.97
Safflower																	3.02	7.42	2.94	*	*
Sugar Beet																		0.29	0.58	0.60	0.64
Tung Nut																		0.08	0.32	0.15	4.92
Grape																				1.02	1.25
Sugarcane																				0.07	0.20
P. Rico Reins																					0.05
Sunflower																					
Forage Seed.																					
Sweet Corn																					
Forage Prod.																					
Rye																					
Almond																					
Prev Planting																					
Hybrid Seed																					
Citrus Tree																					
Table Grape																					
Pepper																					
Popcorn																					
Fresh Tomato																					
Walnut																					
Cotton, ELS																					
Cranberry																					
ALL PROGRAMS	0.53	1.31	0.91	1.12	0.97	1.15	1.24	1.14	1.26	0.69	0.26	0.77	0.58	0.89	1.10	0.77	0.90	1.13	0.68	1.27	1.05

* No Program.

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FEDERAL CROP INSURANCE CORPORATION
GOVERNMENT OPERATIONS

LOSS RATIOS - 1969-1984
CROP YEAR

PROGRAM	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1948-84
Wheat	0.74	0.46	0.42	0.42	0.83	0.97	0.51	0.94	1.47	0.48	0.98	2.85	0.97	0.93	1.02	1.59					1.06
Cotton	2.61	1.33	1.67	0.97	0.46	2.24	3.22	3.57	0.47	1.13	1.48	1.81	1.14	1.78	1.77	1.29					1.56
Combined Crop	0.06	0.21	0.14	0.29	1.02	1.06	0.61	0.46	1.06	0.08	0.07	6.96	0.17	0.32	0.62	0.11					1.13
Tobacco	1.06	0.58	0.39	0.36	0.67	0.29	1.06	0.91	2.98	0.42	1.11	2.59	0.89	1.05	3.23	0.65					1.16
Corn	0.57	1.17	0.37	0.25	0.25	2.30	1.16	2.40	1.86	0.20	0.15	1.26	0.59	0.52	2.82	1.07					1.02
Flax	0.27	0.93	0.69	0.70	1.24	1.94	0.98	2.53	1.44	0.65	0.53	1.97	0.90	1.20	0.81	0.88					0.90
Bean	1.18	0.81	0.41	0.52	0.91	0.13	0.82	0.68	1.01	0.90	0.34	0.71	1.02	2.95	1.19	1.17					1.32
Citrus	1.75	3.11	0.63	1.23	0.44	0.42	0.37	2.66	0.28	1.01	0.50	1.94	2.23	0.05	0.00	2.76					1.44
Soybean	0.89	0.59	0.72	0.79	0.31	1.01	0.39	1.11	0.30	0.35	0.38	2.11	1.83	2.14	2.61	1.60					1.73
Barley	0.31	0.66	0.30	0.61	0.86	1.53	1.07	1.31	0.99	0.40	0.56	2.39	0.82	0.69	0.89	1.99					1.00
Peach	0.41	1.19	1.77	2.18	2.41	1.14	1.42	0.46	0.50	2.17	0.15	0.62	0.35	4.16	2.69	1.29					1.38
Grain Sorghum	0.41	0.96	0.58	0.87	0.23	1.63	0.52	0.91	0.47	1.46	0.62	2.96	0.93	1.23	2.31	2.44					1.25
Oat	0.43	0.47	0.25	1.23	1.03	1.05	0.53	2.99	0.56	0.53	0.60	2.44	1.39	0.61	0.80	1.13					0.92
Rice	0.44	0.07	0.51	0.57	0.63	0.41	0.23	0.54	0.72	0.76	1.55	4.58	1.86	3.49	4.16	1.64					2.48
Raisin	0.30	0.00	0.00	0.01	0.02	0.00	0.20	11.66	0.02	12.13	0.00	0.00	0.01	6.29	0.95	0.64					2.08
Pea	0.72	0.98	0.59	0.52	1.54	0.78	0.83	0.80	2.93	0.84	0.63	0.47	0.68	0.73	0.99	1.14					1.18
Peanut	0.63	0.22	2.16	0.53	0.21	0.32	0.32	0.49	0.57	0.28	0.67	8.22	0.62	0.79	2.91	0.95					1.29
Potato	1.54	*	*	*	*	*	*	*	*	0.00	0.14	0.00	1.36	2.06	2.81	2.77					2.38
Apple	0.24	1.65	1.06	3.25	1.31	1.48	0.18	1.38	1.93	1.07	0.80	0.90	1.54	1.56	1.85	1.12					1.35
Cherry	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*					2.61
Tomato	1.79	0.30	0.40	0.84	0.97	2.38	1.93	0.19	0.79	0.29	1.44	0.23	0.39	2.63	1.11	2.00					1.47
Safflower	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*					3.93
Sugar Beet	1.28	1.32	0.56	1.01	0.77	1.13	1.90	0.59	0.33	0.20	0.39	0.72	11.58	0.51	0.75	0.62					0.72
Tung Nut	0.38	2.27	*	*	*	*	*	*	*	*	*	*	*	*	*	*					0.75
Grape	2.59	0.77	0.00	4.10	1.55	0.11	0.10	0.25	3.85	0.20	0.19	0.17	0.84	2.25	1.85	0.71					1.48
Sugarcane	0.08	0.22	0.89	0.94	2.79	0.50	0.46	0.64	0.84	1.57	0.70	1.37	1.22	0.74	4.36	0.48					1.44
P. Rico Reins	0.05	0.16	0.01	0.03	*	*	*	*	*	0.24	*	*	*	*	*	*					0.14
Sunflower								0.35	0.12	0.12	0.43	1.83	0.70	1.43	1.12	1.67					1.10
Forage Seed.										2.39	4.57	5.90	4.59	2.75	1.20	0.37					3.53
Sweet Corn										0.57	0.54	0.72	1.10	0.43	1.17	0.48					0.71
Forage Prod.											0.68	3.41	3.16	2.12	2.71	0.00					2.20
Rye												2.88	0.00	0.27	0.59	0.30					0.37
Almond													0.02	0.76	3.10	0.01					1.05
Prev Planting														5.73	1.31	0.45					4.94
Hybrid Seed															12.03	2.28					5.31
Citrus Tree															0.00	22.88					9.57
Table Grape																1.46					1.46
Pepper																1.17					1.17
Popcorn																3.99					3.99
Fresh Tomato																7.07					7.07
Walnut																0.04					0.04
Cotton, ELS																0.00					0.00
Cranberry																0.00					0.00
ALL PROGRAMS	1.08	0.94	0.60	0.60	0.60	1.17	0.86	1.57	1.46	0.50	0.65	2.26	1.09	1.46	2.21	1.48 (1)					1.25

* No Program.

(1) The crop year 1984 ratios are based on estimates as of February 1985.

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FEDERAL CROP INSURANCE CORPORATION
REINSURANCE OPERATIONS

LOSS RATIOS - 1981-1984

CROP YEAR

PROGRAM	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1981-84
Wheat													0.79	0.75	0.67	1.67					1.13
Cotton													1.36	2.38	1.83	1.75					1.81
Combined Crop													0.00	0.00	0.00	0.00					0.00
Tobacco													1.58	0.77	2.24	0.60					1.14
Corn													0.38	0.53	2.54	0.95					1.10
Flax													0.00	1.29	1.04	0.84					1.04
Bean													0.11	3.04	1.43	1.11					1.75
Citrus													0.00	0.32	0.00	4.04					2.66
Soybean													0.68	1.17	1.94	1.70					1.62
Barley													0.71	0.46	0.79	2.34					1.54
Peach													0.00	2.28	3.31	0.50					1.46
Grain Sorghum													0.97	0.96	1.72	2.30					1.87
Oat													1.94	0.54	0.71	1.48					1.03
Rice													0.00	1.54	3.55	1.77					1.95
Raisin													0.00	0.00	1.27	0.75					1.01
Pea													0.00	0.32	0.93	0.71					0.73
Peanut													0.00	0.86	3.29	0.85					1.48
Potato													0.00	0.95	2.56	1.77					1.82
Apple													0.00	2.24	0.22	2.69					2.18
Cherry													*	*	*	*					*
Tomato													0.00	0.16	1.41	1.15					1.23
Safflower													*	*	*	*					*
Sugar Beet													0.10	0.19	0.81	0.40					0.40
Tung Nut													*	*	*	*					*
Grape													0.00	0.00	2.39	1.25					1.87
Sugarcane													0.00	0.00	7.60	0.50					3.64
P. Rico Reins													*	*	0.38	0.90					0.64
Sunflower													1.02	1.33	1.03	1.49					1.31
Forage Seed.													0.00	2.75	0.23	1.07					1.25
Sweet Corn													0.00	1.22	2.00	0.40					0.80
Forage Prod.													0.00	2.00	1.53	0.74					1.29
Rye													0.00	1.00	0.10	0.49					0.51
Almond													0.00	0.00	3.68	0.01					1.04
Prev Planting														0.00	0.00	0.00					0.00
Hybrid Seed															15.81	1.85					2.87
Citrus Tree															0.00	21.75					21.75
Table Grape																3.75					3.75
Pepper																1.62					1.62
Popcorn																3.80					3.80
Fresh Tomato																3.74					3.74
Walnut																0.82					0.82
Cotton, ELS																1.50					1.50
Cranberry																0.53					0.53
ALL PROGRAMS													0.68	0.89	1.66	1.43 (1)					1.37

* No Program.

(1) The crop year 1984 ratios are based on estimates as of February 1985.

STATEMENT OF MR. SPRAGUE

Mr. Sprague. Thank you, Mr. Chairman. It is my pleasure, as well, to appear before this subcommittee to discuss our 1986 budget for the Federal Crop Insurance Corporation. The Corporation is submitting two budgets, two proposals. One under existing legislation and one under proposed legislation for fiscal year 1986.

FISCAL YEAR 1986 BUDGET

Under proposed legislation, Federal costs for administrative expenses and for premium subsidy would be phased out over the next 5-year period. Under existing legislation, Federal funding would continue to cover the administrative costs and the premium subsidy expenses of the program.

SUPPLEMENTAL REQUEST FOR 1985

Under both proposals, we are expecting program participation to increase from the 44 million acres that were insured in 1984, to about 54 million acres in 1985 and up to 63 million acres in 1986. We are also requesting in both proposals a supplemental, in fiscal year 1985, for the balance of the subscription of capital stock of $50 million.

We have had some extreme and unusual losses resulting from the weather conditions late in 1984, which have created a substantial cash drain in the Corporation's revolving fund. The issuance of the remaining capital stock is necessary to meet our contractual obligations to insured producers.

Projections of continued high losses in 1985 may require additional supplementary funding authority. We are monitoring the situation closely. I expect to recommend some appropriate action regarding additional supplemental authority in the near future.

ADMINISTRATIVE AND OPERATING EXPENSES

The major portion of the budget request will be used to support private sector delivery systems. Our request for 1986 under existing legislation is broken down into two major categories.

Assuming no change in legislation, we will need about $240 million for administrative and operating expenses to fund the program. Most of that money will be paid to the private sector who are our partners in the delivery of this crop insurance program.

PREMIUM SUBSIDY

We will also need about $135 million for premium subsidy. That premium subsidy relates directly to the 1985 sales of crop insurance. So the total budget request, without legislative change, is for about $375 million.

This will allow us to continue our expansion. It will allow us to move to levels of insurance participation that are substantially higher than today.

In regard to proposed legislation, the program levels are presumed to be the same in fiscal year 1986 as if existing legislation has been followed. The only substantial change is the method of funding.

PROPOSED METHOD OF FUNDING PROGRAM

We intend to propose legislation that will increase the producer's share of the premium cost, and the result will be to phase out the Federal payment of administrative expenses and premium subsidies. This will be accomplished over a 5-year period ending in 1990.

The objective is to convert the Corporation into a fully self-supported reinsurance company with a strong regulatory capability. Administrative and operating expenses would total $164 million under this proposal from appropriate sources. The balance of approximately $75 million would be paid from premium income collected from the users of the program. The Federal premium subsidy, likewise, would be reduced.

CROP YEAR 1984 EXPERIENCE

I would like to review, briefly, the 1984 experience of the Corporation. As Mr. Naylor indicated, the Federal Crop Insurance Program is the primary form of Federal disaster protection that is currently available for farmers.

The acres insured and insurance in force have increased substantially. In 1980, we were at program levels of about 26 million insured acres. That is now at 44 million acres. Insurance in force—liability, if you will—has also increased in a proportionate manner, from about $3 billion to nearly $7 billion in 1984.

Our current estimates for crop year 1984 disclose that we expect another year of underwriting losses for the Corporation. We are expecting close to a 1.5 loss ratio by the time that the books are closed on crop year 1984.

This means that we will have paid total indemnities of about $660 million on some $440 million of premium income. This is substantially in excess of our underwriting goals and targets, and substantially in excess of our expectations when we established the premium rates that were in place in 1984.

Only unusual weather across this country can really be considered as being the major cause for that kind of loss. Nearly $200 million of that total loss was incurred late in the crop year 1984, because farmers across this country were unable to harvest in a timely fashion their corn, grain, sorghum, cotton, and other crops because of wet weather. The crop was produced but was not harvested in a timely fashion because of adverse weather.

EXPANSION FOR CROP YEAR 1985

Looking forward to 1985, we expect to continue to expand the Crop Insurance Program. We expect insurance to be offered upon 38 major crops. We have almost 19,000 county programs in 49 States. Crop insurance is now available in virtually every agricultural county in the United States on most of the annual crops that are produced.

We are expecting that insured acres in 1985 will grow to about 44 million across this Nation. We are expecting our premium income to be about $540 million. There is a great deal of optimism in the sales force selling crop insurance across this country at this time, because economic factors, pressures from lenders, and the lack of capability on the part of a substantial number of farmers to bear risk is leading to substantially increased interest in participation in the Crop Insurance Program.

It appears likely at this date, that we will meet or possibly even exceed those program goals of $540 million of premium income in 1985.

IMPLEMENTATION OF ACTUAL PRODUCTION HISTORY

There have been some rather substantial changes in the program being offered to producers across this country. We saw the first implementations of actual production history programs in 1984. We are continuing to expand that kind of a base for yield guarantees across this country.

In 1985, rice, cotton, corn, grain sorghum, tobacco, and peanut programs will have yield guarantees based upon this concept. Further, we are expending a great deal of effort in working with people who help farmers make decisions across this country.

RISK MANAGEMENT

We have been preaching that risk management, and the capability of farmers to handle the risk that they face, will determine who succeeds in the eighties, who will be left to farm in 1990. We expect those who are left in 1990 to be those who have learned how to manage risks properly in the current decade.

So, while we have improved the program, we, at the same time, have spent great efforts conveying, to producers and to people who help producers make decisions regarding the purchase of crop insurance, the magnitude and the significance of those changes which do help producers meet the need that they have on their own farms for protection.

CROP YEAR 1984 EXPERIENCE BY COMMODITY

There are a couple of exhibits that I would like to have inserted in the record. The first exhibit is a revised table of our 1984 crop year experience by commodity. It is dated as of February 1985. It reflects some rather substantial changes that have taken place since the budget was first submitted.

LOSS RATIOS DURING LAST 37 YEARS

The second set of exhibits shows loss ratios during our 37 years of existence. The crop insurance program in those 37 years had had 18 years in which we had positive experience and 19 years in which the reverse has been true. The 37-year loss ratio now stands at 1.27 meaning that we have paid out $1.27 in loss indemnification for every dollar of premium income.

[CLERK'S NOTE.—The exhibits are shown on pages 444–449 as a part of Mr. Sprague's prepared statement.]

INITIATIVE TO RESTRUCTURE THE CORPORATION

The Corporation recently announced a process of restructuring the Corporation to a posture where it would be solely a reinsurance company by some date in the relatively near future. We are finding that more and more crop insurance is being sold on the paper of private insurance companies whom we reinsure under an agreement.

We are finding that method of delivery has provided good, effective service to farmers and effective, efficient service in all respects. The shift to reinsured paper has come at a speed that has amazed some of us in the Corporation.

In 1984, 60 percent of the crop insurance in force across this country was on the paper of those companies that we reinsure. That is a growth from about 35 percent only a year earlier. We expect this trend to continue and the Federal share of the contracts to decline to about 20 percent of the business in the near future.

When we get to that point, we find that we have a very difficult time being cost effective on a unit basis. So, we are looking very closely at the structure of the Corporation and during the next few months expect to make a decision relating to how fast we restructure, reorganize to meet the needs of the current times.

Mr. Chairman, this concludes my statement. I will be glad to answer any questions or furnish any additional information that you might desire.

BUDGET PROPOSALS

Senator COCHRAN. Thank you very much, Mr. Sprague. I appreciate your testimony this morning explaining the proposals that the administration has before the Congress in Federal crop insurance.

Under the proposal by the Corporation to the Congress, is it true that, as you state in the explanatory notes accompanying the budget document, the proposed legislation would actually phase out all Federal premium subsidies, so that the administrative and operating expenses will have to come from the FCIC fund in the future? Is that the proposal?

Mr. SPRAGUE. That is correct. The source for the funds in the FCIC fund would be producer-paid premiums.

Senator COCHRAN. So what we are talking about is that you are suggesting that the Government phase out completely then, from operating and administrative expenses and from premium subsidy of the Federal Crop Insurance Program. Is that correct?

Mr. SPRAGUE. As proposed, the Federal Crop Insurance Corporation would remain as a reinsurance company. It would assume the risk of catastrophic loss that it now does. It would continue to control, to a rather substantial degree, the program activity because it would be necessary if we were to take such risk, as a reinsurer, to evaluate rates, programs, and the operations of private companies.

Senator COCHRAN. Well, what worries me about this is that we have to have an actuarially sound program. We agree on that. You are suggesting, for instance, in your request for funding, that your needs are based on a loss of ratio .90, or $.90 indemnity for every dollar of premium received.

But according to your testimony, over the last 37 years, the experience has been that you paid out $1.27 for every $1 received. How are you going to get the industry to take over a program that has a loss experience like that, and then transfer the cost to America's farmers and expect them to be able to pay the premium?

RATESETTING PROCESS

Mr. SPRAGUE. Well, Mr. Chairman, our expectations in the ratesetting process are to break even with the Crop Insurance Program. Our expectations are to have the .90 loss ratio that has been rather elusive over the last 5 years. We have to go back to 1979 before we find a year with the kind of experience that met that target.

The proposal that is expected to be submitted to Congress, that relates to the removal, if you will, of the Federal subsidies to the program, contemplates that the program will use premium rates that are actuarially sound, premium rates which will yield premiums to pay the losses.

It also contemplates that those same premium rates will pay the administrative and operating expenses of the Corporation. If the premiums set are not sufficient, if there is a catastrophic loss—we have had several of those in the last 5 years—then the Federal Government would still be obligated to meet the terms and conditions of the reinsurance agreement whereby, or under which, we would take the major share of losses which exceed the premium income.

So there would still be the possibility of substantial Federal support in the event of a catastrophic loss situation. But long term, this program must be operated as a business if it is to be successful. And in the insurance business, premium rates must be set at levels equal to the expectations for losses or the company goes out of business.

We ask the private companies that are involved in the partnership of delivering crop insurance, associated with us under the reinsurance agreement, to take a share of the risk. But the risks in this program are huge and they are highly variable.

We do not have the many years of data that we would like to have in order to have the kind of rates that are fully credible. We are doing the best we can with the numbers that we have. We expect to improve as time passes.

Mr. NAYLOR. Mr. Chairman.

Senator COCHRAN. Mr. Secretary.

HISTORY OF FCIC

Mr. NAYLOR. Just to take a moment. Having been involved in this program myself for a number of years, one of the regretable aspects on the history on which we make some of these assessments is that we really have never compared apples to apples. The program, from year to year, has changed significantly as to the terms of the contracts, conditions and so forth. As such, a normal comparison that an insurance company would typically use on its experience is really not valid.

Furthermore, the program, up until the last 2 or 3 years, has been substantially based on a program that took an unusually high number of adverse risks. In many instances, losses were built into its operations which tended to skew the loss of the Corporation from 1948 up until the last couple of years.

One of the assumptions we are making, in looking toward the future strength of this program, is the conversion to a much better quality product in the terms of the individual yield agreement. We are now developing and next year going to completely put in place a producer's coverage which reflects his own ability and performance, and rates structured in such a fashion to reflect that.

LOSS RATIOS

Senator COCHRAN. That bothers me a lot because what has happened in my State, for example, in the three crops that have had the highest loss ratios—cotton, soybeans, and rice—the worse years for loss ratios have been in the last 5 years. In the cotton program, there have been only 3 years in the last 20 which had loss ratios less than one.

So if you assume that that kind of thing is going to continue in the future, what you are going to do is to price out of the insurance market every farmer who is required to pay in the accordance with the loss ratio, if you are going to have an economically sound program with no Federal involvement.

That is what bothers me. We are just going to have a program that cannot be afforded by the farmers in my State.

EFFECT OF CONVERSION TO REINSURANCE

Mr. NAYLOR. I think, Mr. Chairman, frankly we have not seen the full effect of that conversion. As you get a higher percentage of participation, and as you have operators whose coverage reflects their ability to perform and fairly reflects that situation, and if they pay the appropriate premium for it, I think that overall loss ratio will improve, that the cost factors may not be as significant in the shift as many fear that will be.

In fact, I personally do not believe that they will be, and that we can produce a sound and effective program for the use of our farm operators around the country. Obviously, we need some additional time to ensure ourselves that that in fact is the case.

That is provided for in the budget proposal before the Congress in that we do propose an extended transfer or transition over a 5-year period which will give us adequate time to evaluate the effectiveness of the individual yield plans which are just now beginning to take over as a principal source of insurance coverage.

DISASTER SITUATIONS

Senator COCHRAN. In the meantime, what if you have some serious disasters, you have drought problems, you have weather conditions that really hurt the cotton or rice or soybean farmers? You don't have the Federal support for the premiums. You don't have the Federal Government involved in helping to pay operating and administrative costs.

During the time of the experiment, you might lead to the demise of a lot of farmers because of the experiment that is going on.

CROP INSURANCE AS RISK MANAGEMENT TOOL

Mr. NAYLOR. Mr. Chairman, I certainly don't believe that would be the case or will be the case. We are seeing a very rapid expansion of use by farmers of this product as a risk management tool for their operations in an increasingly capital intensive industry.

We are seeing the banks and other financial institutions working with the producers and providing the insurance costs in normal operating expense loans.

I think you will find that the product is increasingly better protection for the individual producer. Many of our operators have not participated in the past because our earlier policies only protected the average producer. The above-average producer was really unable to purchase insurance that reflected his ability.

That change is going to be applied within the next 18 months so that all of our producers will have policies that will reflect their own experience and provide them adequate protection for their own individual situation.

Senator COCHRAN. Senator Burdick.

Senator BURDICK. I had a long discussion with Brother Sprague on this question. We got into most of my questions; but I have a few other ideas here.

First of all, looking at your crystal ball, what do you think the cost to the farmers would be under the new plan?

COST OF NEW PLAN TO FARMERS

Mr. SPRAGUE. Mr. Senator, as we look toward the future, we see some real reductions in net risk cost. In other words, the net risk premium of this program could be substantially reduced if we could increase participation levels to the extent that adverse selection becomes less of a problem than we have had in the past.

The very fact that we have an actual production history program will begin to reduce or eliminate adverse selection as a problem in our insurance program. Reducing that adverse selection can have an effect of reducing the net risk cost of the program in a rather sizable amount—my actuaries estimate between 20 and 50 percent.

ACTUAL PRODUCTION HISTORY PROGRAM

If we can initiate the implementation of new programs like the actual production history program, and at the same time phase out, over a period of time, Federal support for operating expenses and premium subsidy, we are anticipating that a rise in the producer's share of the premium will not be nearly as much as some would project.

There would be a rise. There is no question about it. Probably in the neighborhood of 50 percent by the year 1990. But keep in mind that the average cost of crop insurance today is a rather insignificant share of the total costs of producing a crop.

In the case of a corn farmer, the average premium in the Nation is only about $7.50 per acre today. That is about one-third of the cost of his seed. The same argument, the same analogy could be made with the producers of many other crops. The average wheat producer is only paying $4.50 per acre for crop insurance today. In most cases, he is spending substantially more than that for seed.

DETERMINING FACTORS FOR PURCHASE OF CROP INSURANCE

We believe there are two things that are more important than price when it comes to the decision of whether or not to buy crop insurance. No. 1, is there a need for an insurance product? Is there a need for the protection that may be offered? In some cases that may be translated into a question like, "Is the lender requiring it in my case?"

Once a determination has been made that there is a need for something like crop insurance, the second most important item in regard to the decision to buy or not, is the question, "Does the product meet my need, considering the actual production history program?" The improvements that we have made in this program in the last few years have made it a product that meets the needs of far more producers than ever before.

The third factor is the price. But price is secondary to the other two factors when it comes to determining whether or not to purchase crop insurance.

Senator BURDICK. Well, I think it is a pretty big factor today, according to the mail I get. But there is something else here we have to take into consideration. I understand that there is a catastrophe limit in which the private insurance will cover the farmer. Uncle Sam still has exposure. Is that correct?

Mr. SPRAGUE. The risk of losses will continue to bear heavily upon the Federal Crop Insurance Corporation when those losses exceed the premium income. This is the way the insurance industry works with almost all lines of insurance.

REINSURANCE

Reinsurance is a normal practice within the insurance industry. Most companies, almost all companies, which are involved in property and casualty insurance, protect themselves with a reinsurance agreement or contract with someone else so that they don't lose their shirt, if the house burns, for instance.

The same is true in a line of insurance like crop insurance, multiple peril crop insurance. In the case of MPCI, multiple peril crop insurance, the only available source of reinsurance today for private insurance companies is the Federal Government.

Senator BURDICK. That is the difference that I am talking about. All the other reinsurance is private reinsurance, but Uncle Sam will be reinsuring this. He stands in back of his contracts.

Mr. SPRAGUE. Correct.

Senator BURDICK. So I don't understand why the Government insurance should increase, as long as we are taking some of the risk.

Mr. SPRAGUE. Do you want to talk about this, Mr. Secretary?

Mr. NAYLOR. Excuse me, Senator.

HIGHER COST OF CROP INSURANCE

Senator BURDICK. You talked about the cost being higher. It might be stabilized or be the same because Uncle Sam is still back there, you know, if you go over certain limits. Why should it be higher?

Mr. SPRAGUE. The only reason it would be higher would be the removal of the Federal subsidies that are now in place, the ones that support administrative and operating expenses, and the portion of the pure premium cost now paid by the Federal Government through the program.

That portion would be picked up by the producer under the proposal of the administration.

Senator BURDICK. The crop insurance people wouldn't take the whole program over without Uncle Sam's backing, would they?

Mr. SPRAGUE. I don't think so today because commercial reinsurance is either not available or only available at a price that would limit the capability to market the product.

Senator BURDICK. Now, just a short reply. Why will the farmer have to pay more under this system than the present one? Why?

Mr. SPRAGUE. Because the Federal premium subsidy and the administrative and operating expenses of the program would be paid out of premium income, not out of appropriated funds.

Senator BURDICK. That is all, Mr. Chairman.

Senator COCHRAN. Senator Andrews.

AVAILABILITY OF CROP INSURANCE

Senator ANDREWS. Mr. Sprague, are you readjusting this program so it is going to be available to more farm emergencies in more counties?

Mr. SPRAGUE. Senator, we have added about 1,000 county programs for 1985. Crop insurance is now generally available for the producer of about 22 or 23 commodities in this country. That includes almost all of the widely produced annual crops. So we are continuing our expansion efforts.

Universal availability is an ultimate goal of the Corporation, but it is going to be some time before we can acquire the kind of data base that will support programs in many vegetable and fruit crops that are grown on small acreages in this country.

Senator ANDREWS. But are you going to be differentiating your yields that can be insured within a county so that it doesn't favor a county which has varying soils and climate conditions?

The farmers with the poorer crop land get a great bargain when they insure with you. The ones in the better crop land have a great incentive to stay out of the program.

What are you doing to rectify that problem?

ACTUAL PRODUCTION HISTORY BASIS FOR YIELD GUARANTEES

Mr. SPRAGUE. Senator, we are moving to the actual production history basis for yield guarantees in all programs as rapidly as possible. In the case of wheat, barley, and oats, that move will be made with the next crop to be planted, beginning with the fall seedings, in 1985.

Senator ANDREWS. Beginning with the fall seedings, not with the spring seedings?

Mr. SPRAGUE. Not with the spring seedings.

Senator ANDREWS. So right now you are still going on a one-crop yield per county?

Mr. SPRAGUE. We are continuing to use the area coverage plan for wheat, barley, and oats. For corn, grain sorghum, tobacco, peanuts, cotton, and rice, we have already made the shift.

Senator ANDREWS. That is correct. But you are going to have in effect, for next year's crop, the 1986 crop, the——

Mr. SPRAGUE. Individual coverage plan.

Senator ANDREWS. Individual yield will encourage a broader based participation in each county.

FCIC MOVING TOWARD REINSURANCE

I understand that you have made a determination that the FCIC should move into a reinsurance posture as well, rather than be a direct insurer. I commend you for that. Industry breakdowns that I have seen indicate that the direct insurance portion of FCIC's portfolio is only 20 percent of the total crop insurance.

Mr. SPRAGUE. That is the reason that we have made the proposal that has been made, Senator. It is true that in many cases, we expect—in fact, nationwide, we expect—about 80 percent of the business to be on the paper of reinsured companies in 1985.

But when we get down to where only 20 percent of the business is on the paper written by the Federal Crop Insurance Corporation, it is very difficult to be cost effective.

Senator ANDREWS. Will there be any displacement of coverage for farmers in a situation where a private agency may be reluctant to provide coverage for them?

PROVISION FOR UNIVERSAL AVAILABILITY OF CROP INSURANCE

Mr. SPRAGUE. Universal availability is something that we have to insist upon private companies providing, if they are to be the sole delivery mechanism. We are in the process of making some modifications to the reinsurance agreement that we have with those companies which would provide Federal Crop Insurance the capability of requiring a company to write a particular individual who otherwise would not be serviced.

So universal availability is a must. It is something that has to happen if we were to withdraw as a direct writer.

Senator ANDREWS. Do you foresee a cut in premium subsidy to the farmers if your plan is written into the regulation?

COST OF CROP INSURANCE TO FARMER UNDER REINSURANCE

Mr. SPRAGUE. If you are referring to the plan to restructure the Federal Crop solely as a reinsurance company, I see no change in costs to the producer. I do see some savings to the U.S. taxpayer which could be used to support the program to an extent greater than otherwise would be possible with the same dollars of appropriated funds.

So it might well save producers money if they are expected to bear a share of the administrative and operating costs. There are some cost savings to be gained from our withdrawing as a direct writer when our share of the business goes to a level of 20 percent or below.

Senator ANDREWS. Thank you, Mr. Chairman.

Senator COCHRAN. Senator Burdick.

PREMIUM SUBSIDY PROVISION

Senator BURDICK. I have one question, Mr. Sprague. You say that we would save the amount of subsidy that we would put into this program. That is one of the reasons why there would be an increase for the private farmer in fees. Can you reply now, or in the future, how much that subsidy is? How much would be picked up?

Mr. SPRAGUE. Under today's program, under the existing statute, we subsidize the pure premium cost of the 50- and 65-percent elections to the extent of 30 percent.

In other words, the Federal Government picks up 30 percent of the net risk premium for those two options. In the case of the 75-percent option offered by the Corporation and the reinsured companies, the subsidy level is the same dollars per acre as the producer would have received if he had chosen the 65-percent option.

So the total premium subsidy is something less than 30, because many producers choose the higher option for which they pay all of the costs.

Senator BURDICK. What I was getting at is: Can you supply some figures as to how much these subsidies have been over the years?

Mr. SPRAGUE. Well, we are asking for $135 million to support the 1985 sales. In other words, if we have $540 million of premium income next year, then this year, 1985, we will need the $135 million requested in the budget for the premium subsidy that is applicable to those sales.

Senator BURDICK. Private industry would pick that up and put it in the rates?

Mr. SPRAGUE. No; private industry is reducing the rates to the producers by that amount today. Under the proposal—under the proposed legislation, that subsidy would be removed and that additional cost would be borne by the producer himself.

Senator BURDICK. That is exactly what I meant.

Mr. SPRAGUE. OK.

Senator BURDICK. That is why the producer pays more, he won't have that subsidy any longer.

Mr. SPRAGUE. That is correct.

SUBMITTED QUESTIONS

Senator COCHRAN. Mr. Sprague, I have some additional concerns: Whether or not this phaseout of Government supports is going to lead us back into having to enact legislative programs for disaster assistance to take up the slack; the effect of the program on master marketing agencies; what happens in a county where there is no insurance agent or not enough insurance activity there; and is the Federal Government going to use the ASCS offices to take up the slack?

Other concerns that I have, I will submit to you in writing. I hope you will be able to respond to these questions at your earliest convenience.

Mr. SPRAGUE. Mr. Chairman, we will be delighted to respond to any questions from you or any other members of the subcommittee.

Senator COCHRAN. Thank you very much for being here and presenting the budget request for the administration on this topic. You may be excused now as we go to the consideration of the proposal of the Rural Electrification Administration.

[The following questions were not asked at the hearing, but were submitted for response for the record:]

QUESTIONS SUBMITTED BY SENATOR COCHRAN

NEW PLAN FOR REINSURANCE

Question: On Monday of this week, the Federal Crop Insurance Corporation published an Advanced Notice of Proposed Rulemaking. The rule contemplates an accelerated phase-out of insurance written directly by FCIC.

Will there be any cost savings for FCIC if this plan is implemented?

Answer: Yes, the elimination of the master marketer system and related administrative and operating costs will have an impact on FCIC overhead. The conversion of FCIC from a direct writer of insurance to strictly a reinsurance operation could result in internal cost savings of an estimated $54 million a year, compared to costs budgeted for fiscal year 1984. (About $25 million of that savings would be offset by additional costs associated with reinsuring the book of business currently on federal paper.) Additionally, $8-10 million in planned program modifications could be cancelled, resulting in initial estimated net savings of $37-39 million to the taxpayers.

Question: When will FCIC discontinue writing insurance under this plan?

Answer: If such a course of action is determined feasible and advisable, conversion would begin October 1, 1985, the date the current Agency Sales and Service (Master Marketing) Agreement expires.

COUNTY WITH NO AGENT

Question: What will happen if there is a county in which there is no insurance agent offering crop insurance?

Answer: If a decision is made to restructure FCIC along more commercial reinsurance company lines, FCIC will continue to comply with all requirements set forth in the Federal Crop Insurance Act.

Should such a conversion be deemed feasible and advisable, FCIC will maintain operations of sufficient capacity to service carryover FCIC direct insurance business until such time as the business can be converted to reinsured policies.

NEW PLAN FOR REINSURANCE - EFFECT ON MMA's

Question: How will Master Marketing Agencies (MMA's) be affected?

Answer: To maintain their association with the crop insurance program, two options would be available to MMA's:

1. They could convert the agency to a primary insurance writer and, if qualified, sign a Reinsurance Agreement with FCIC. While this option would require them to agree to all the terms and conditions of the Reinsurance Agreement now proposed, they could stand to share substantially in underwriting profits from crop insurance sales. If they select this option, FCIC would assist them in meeting all Federal requirements and standards.

2. They could negotiate with a commercial insurance company reinsured by FCIC to absorb their personnel and their book of business under its name.

NEW REINSURANCE AGREEMENT

Question: There is a proposed Standard Reinsurance Agreement revision currently scheduled to take effect July 1. How does this relate to the plan to transfer all insurance to reinsurance companies?

Answer: The proposed Agreement is structured to allow either a continuation of the current program or the establishment of the new system.

PHASE-OUT OF FEDERAL SUPPORT

Question: Is it true that the Administration has proposed a phase-out of Federal support for the crop insurance program?

Answer: The Administration has made the proposal to phase out the Federal subsidy and administrative expenses over a five-year period beginning in fiscal year 1986.

COUNTIES IN WHICH ASCS SELLS AND SERVICES CROP INSURANCE

Question: Currently, the Agricultural Stabilization and Conservation Service (ASCS) sells and services the insurance program in counties where agents are not available. What will happen in those counties when Federal support is eliminated?

Answer: Under the proposal presently being considered regarding the structure of the Federal Crop Insurance Corporation, the present sales and service functions now handled by ASCS or FCIC will be assumed by agents of the Multiple Peril Crop Insurance companies. These companies have greater personnel resources than either ASCS or FCIC, and are in a position to provide even wider service than has been available in the past.

PHASE-OUT PRIOR TO CROP INSURANCE COVERAGE

Question: Lenders are now starting to require more and more producers to purchase crop insurance as a prerequisite for loan approval. They are even doing that for producers whose crops are not covered by crop insurance. I realize that that could be a local problem, but the producers of those crops are worried that the program will be phased out before their crop is covered in their county. How do you respond to this?

Answer: Under the proposed FCIC changes, FCIC would retain certain functions required by law. The agency would continue to set and/or approve rates and coverages, provide program direction, and maintain a strong quality assurance capability. The oversight and review of the operations of reinsurance companies would be significantly strengthened. Through these functions, FCIC would continue to expand coverage to new crops and new counties. These efforts to continue to broaden the number of crops and counties covered by Federal Crop Insurance would not be affected by the proposed changes in FCIC structure.

ACTUARIAL SOUNDNESS

Question: The FCIC estimates its funding needs based on a loss ratio of .90 (90¢ indemnities for every dollar of premium income.) Yet, over the 37 years of the crop insurance program's existence, the cumulative loss ratio is 1.27. What is being done to make the program actuarially sound?

Answer: Introduction of the actual production history (APH) programs and their associated rating structure is the most significant development in this regard. APH reduces the potential for adverse selection, a weakness of the area guarantees previously offered. Adverse selection occurred whenever the area guarantee exceeded a producer's historical experience by a significant amount.

FCIC also is developing rate making systems via computerized data bases which will permit more timely and complete analysis of data. Associated with this activity is the development of the capability to perform mathematical modeling and more adequate statistical analysis of rates and other insurance information. The Statistical Analysis System (developed by the SAS Institute) has been implemented by Actuarial Division to permit this more timely and complete analysis.

Actuarial Division also is implementing a rate making model proposed by actuarial consultants who reviewed FCIC's actuarial operations.

A key component of this model is a formal definition of catastrophe and a process for estimating the required loadings for it.

We anticipate that all these actions will lead to a more responsive rate making system to provide adequate and equitable rates.

INDEMNITY PAYMENT PROCEDURE

Question: I am told that premiums on crop insurance are not required until harvest. I am getting some complaints from my state from people who have claimed a loss early in the year and could have used the indemnity payments to replant. They are saying that FCIC withheld the premium from payment of the indemnity, just at a time when the needed cash flow could help a farmer produce a crop. Is this common procedure? What is the reasoning behind this?

Answer: Technically, premiums on crop insurance policies are payable at the time of planting. However, it is FCIC practice not to bill the insured for the premium until the fall, usually after the harvest. The insured is more able to meet the premium payment once he has been paid for his crop. It has been FCIC's policy in the past to deduct the premium payment from any replant or indemnity payment made to an insured. The rationale for this was to assure the Corporation that it would be paid its premium.

Beginning with the 1985 crop year, this policy will no longer be followed in relation to replant payments. Unless the billing date (in the fall) has already passed, no deduction will be made from a replant payment for any debt owed the Corporation.

FY 1985 SUPPLEMENTAL

Question: You have submitted a budget request for $50 million for the purchase of capital stock of FCIC. How critical is this? Will the $50 million be enough to get you through FY 1985?

Answer: Our request for $50 million in capital stock will fall substantially short of meeting the Corporation's requirements for fiscal year 1985. As of March 20, 1985 our cash balance was $18 million with approximately $85 million in outstanding indemnities to be paid.

PHASE-OUT OF FEDERAL SUPPORT

Question: The explanatory notes refer in several places to "increasing the producer's share of premium cost," but they never mention the percentage by which that share will be increased. Currently, the subsidy is 30%.

What will be the producer's share under the proposed legislation?

Answer: In fiscal year 1986, the producer's share of premium is estimated at 83 percent.

Question: How quickly will the producer's share accelerate?

Answer: It is estimated that the producer's share of premium will gradually be increased to assume the entire premium cost by fiscal year 1990. Although the producer's share of premium will increase, increases in total premium cost may be moderated by a reduction in the adverse selectivity which we anticipate will result from implementation of the Actual Production History program.

Question: Won't the producer's share eventually increase more than the 30% subsidy, since you propose that premiums should cover administrative expenses as well?

Answer: Yes. However, as stated earlier, with implementation of the Actual Production History Program, adverse selectivity will be reduced which should reduce the historical loss ratios and moderate increases in the overall cost to the producer.

Question: How much do you estimate premiums will increase due to the eliminated subsidy? Due to administrative expenses?

Answer: It is estimated that by fiscal year 1990, premium income must increase to cover the current subsidy and all administrative and operating expenses. For fiscal year 1986, increases would cover an estimated $75 million of administrative and operating expenses, and $43 million of premium subsidy.

REDUCED STAFF-YEARS

Question: The explanatory notes show that there will be a decrease in staff-years by 100, to 1,230. Is this the estimate under current law, or under proposed legislation?

Answer: The estimated 1,230 staff-years is the same under current law as under proposed legislation.

ACTUAL PRODUCTION HISTORY (APH) ANALYSIS

Question: In your statement, you point out that analysis and preparation for Actual Production History (APH) is an ongoing activity in FCIC. Will this continue during the phase-out?

Answer: As noted earlier, FCIC will retain certain of its functions required by law. As these functions directly relate to the continued development and oversight of the crop insurance program, you may be assured that the FCIC efforts to implement and improve the APH program will be continued both during and after the proposed changes in FCIC's structure.

APH COVERAGE

Question: What crops are not covered by Actual Production History?

Answer: In crop year 1984, APH was implemented for cotton and rice. For crop year 1985, APH will be extended to corn, grain sorghum (milo), tobacco and peanuts.

Question: How long will it take to bring those crops into the APH program?

Answer: FCIC intends to extend the APH program to all covered crops by crop year 1987.

OIG STUDIES

Question: The Office of Inspector General at USDA has conducted two studies on FCIC Actuarial Practices and Procedures, but neither was complete as of the printing of the explanatory notes. Are they now complete? If so, what were their general conclusions?

Answer: All actions with regard to the audits are not completed because FCIC either 1) does not agree with the recommendations of OIG, or 2) is moving forward with research as requested by OIG.

Audit 599-26-KC recommends that actual insured acres the previous year be used to distribute the average bushel coverage over a county. Studies needed to complete OIG Audit 599-26-KC are underway. A report should be ready by July 1985. FCIC actuarial experts maintain that the recommendation is not a sound statistical process. Further, implementation of actual production history programs renders the issue moot.

Audit 599-22-KC recommends that FCIC:

1. Test the impact of adjusting the base premium rate to reflect the cumulative loss ratio.

2. Use the cumulative loss cost ratios experienced in a risk area of a county to determine the base portion of the premium rate actually needed for future years.

3. Develop and implement an annual plan for identifying those county crops' coverage and rate structures that are not financially sound.

4. Eliminate the base period years with low county average yields when determining the base portion of the estimated loss cost ratio.

5. Establish criteria for separating actual loss cost ratios into their "normal" and "catastrophic reserve" portions.

With regard to FCIC action on these matters, FCIC had contracted a review of its actuarial operations with an actuarial consulting firm. The rate making approach recommended by the consultants differs markedly from those made in recommendations 1 and 2 of OIG Audit 599-22-KC. FCIC is conducting a study to compare the two approaches. A report of this study is planned for May 1985.

FCIC has established the annual plan of recommendation 3 of OIG Audit 599-22-KC. The frequency of reviews is:

Coverage - Every 3 years
Rate adequacy - Every 2 years
Rate equity - Every 5 years

Crops would be placed on a schedule so that some reviews are made every year.

Recommendations 4 and 5 of OIG Audit 599-22-KC are consistent with the recommendations of the actuarial consultant's report. Implementation depends upon the rate making approach determined as a result of the studies conducted for recommendations 1 and 2. Work will begin once those studies are completed.

Question: Are you proceeding properly, or were significant changes recommended?

Answer: FCIC believes that the methods proposed by OIG reflect an accounting point of view and do not give adequate consideration to actuarial and statistical implications. FCIC does not disagree with the intent of the recommendations, which we believe are intended to devise a rate making system that is responsive and which supports automation. The actuarial consultants' report is intended to accomplish the same objectives. These objectives were incorporated into Actuarial Division's plan of work in both F.Y. 1984 and 1985.

ACCURACY OF ESTIMATES

Question: FCIC is supported by premiums from farmers and an annual Federal appropriation to subsidize these premiums and pay for the program's administrative and operating expenses.

The appropriation requirements of FCIC for any given year are directly related to the participation rates, cancellation rates, and premium income. For the past few years, FCIC has significantly overestimated participation rates and premium income. For example, FCIC projected that participation for crop year 1983 would represent 30 percent of all insurable acres, but actual participation was only 11 percent. Further, administrative and operating expenses are rising quickly. For example, administrative expenses increased from $38 million in 1980 to $173 million in 1982, and FCIC estimates they will increase to over $500 million. Given a low participation level, what steps is FCIC taking to increase participation and premium income?

Answer: In 1984 the overall participation rate in the crop insurance program was 16%, an increase of 5% over 1983. Premium income for the same period increased by 51% from $291 million to $440 million. The introduction of the Actual Production History program, which will base insurance coverage on actual rather than average county yields, is expected to attract substantial numbers of producers who previously could not obtain adequate coverage. Premium income will increase commensurately. Our current estimate for crop year 1985 is $540 million.

METHODOLOGY OF ESTIMATING PROGRAM LEVELS

Question: Is FCIC taking steps to more realistically project future years participation, cancellation, and premium income levels?

Answer: Projecting participation, cancellations and premium income is at best an art, not a science, inasmuch as numerous factors beyond the Corporation's control influence the producers' decisions. Changes in weather conditions, acreage set-aside programs, commodity prices, and lender requirements, to name a few, can radically alter projections. However, within these parameters we are attempting to improve our assessment of business volume.

STUDY ON DELIVERY SYSTEMS

Question: In 1981, FCIC began to shift sales and loss adjustment functions from the government work force to the private sector. In view of rising administrative costs, resulting from the change in delivery systems, has the Department undertaken a study to determine whether its current delivery system is cost effective for the government?

Answer: The rapid movement of business from federal paper, serviced by FCIC, to companies reinsured by the Corporation has reached the point where it is no longer cost effective for the FCIC to continue operating as it has in the past. In 1980 the ratio of internal administrative costs to premium was 1:4.2. By 1984 the ratio was 1:2.4. Thus, administrative costs almost doubled in four years for the Corporation's book of business. Stated another way, commercial companies in 1984 sold and serviced $262 million in premium at a cost of $79 million. The FCIC, on the other hand sold and serviced $176 million in premium at a cost of $99 million.

It is for this reason that the Corporation is considering phasing out of the direct writing of insurance to become solely a reinsurance company.

REINSURED COMPANIES

Question: FCIC provides reinsured companies an administrative and operating allowance of 27 percent of the company's book premium for new business and 22 percent of book premium for carryover business. In addition, for claims adjustments work, FCIC pays the company 4 percent of book premium and 3 percent of total indemnities paid on the company's policies. What is the basis for these allowances?

Answer: This expense reimbursement schedule was established for the 1981 Reinsurance Agreement and continued through the 1984 Reinsurance Agreement. The schedule was based on FCIC's estimated expenses to service the all-risk crop insurance business.

The expense reimbursement schedule was modified for the 1985 crop year through the use of an amendment to the Reinsurance Agreement. The administrative and operating allowance was established at a uniform 24 percent for all business. Also, the claims adjustment expense reimbursement was revised to 4% of book premium and a decreasing level of expense reimbursement on paid indemnities. The actual schedule is:

LOSS RATIO	EXPENSE REIMBURSEMENT
0 - 1.00	3% of indemnities paid in this interval
1.00 to 2.00	2-1/2% of indemnities paid in this interval
2.00 to 3.00	2% of indemnities paid in this interval
3.00 to 4.00	1-1/2% of indemnities paid in this interval
4.00 and above	No additional expense reimbursement

The revisions in the administrative and operating expense were based on a level expense reimbursement in the sales and service agreement. The reduction in loss adjustment expense reimbursement was because a lower expense reimbursement percentage is required at higher loss ratio.

COST STUDY TO DETERMINE EQUITABLE RATES

Question: Did FCIC undertake a detailed cost study to determine whether these rates are equitable to the Federal government?

Answer: These changes to the expense reimbursement schedule were based on FCIC's internal expense review. Additionally, an independent actuarial consulting firm conducted a preliminary review of the expense reimbursement schedule. Also, FCIC currently has a contract with an independent accounting firm to review company expenses in relation to FCIC's reimbursement schedule.

NEW REINSURANCE AGREEMENT

Question: There is a proposed Standard Reinsurance Agreement revision currently scheduled to take effect July 1. Please describe this proposed reinsurance agreement?

Answer: Mr. Chairman, the proposed agreement, while not yet complete, is expected to contain many reinsurances to cover different situations and to promote maximum sales and risk retention by the companies involved in the sales and servicing of crop insurance. Some of the key provisions are:

-- An assigned risk reinsurance
-- A surplus share reinsurance
-- A state stop loss reinsurance
-- A national stop loss reinsurance
-- A portfolio exchange

We will be pleased to provide you a copy of the revised reinsurance agreement when it is available in its final form.

RESEARCH AND DEVELOPMENT ACTIVITY

Question: Although FCIC will not be writing policies, it will still, obviously, have an interest in research and development. Why do you plan to phase down R&D?

Answer: Mr. Chairman, crop insurance R&D is vital to the program, and will continue. But, private reinsured companies will assume the cost of future R&D. Since the passage of the Federal Crop Insurance Act of 1980, private reinsured companies have developed our cranberry, extra-long-staple cotton, and nursery insurance programs. We expect these types of private sector initiatives to continue. In conjunction with the development of new crop policies, FCIC will retain review and approval authority.

Question: What kinds of R&D have been done by FCIC?

Answer: Mr. Chairman, in order to better meet the needs of our insured producers, and to adapt our current crop insurance policies to the ever changing agricultural environment, our research and development staff continually reviews and makes recomendations to FCIC management concerning all existing commodity programs. In addition, they conduct research concerning new programs for previously uninsured commodities to determine the feasibility of creating new crop insurance programs. Since 1980, our Program Development Division has created or substantially revised about 40 crop insurance policies and related loss adjustment handbooks.

PROPOSED TRANSITION TO PRIVATE INSURANCE COMPANIES

Question: The Federal Crop Insurance Corporation recently issued a proposed rule to terminate the Master Marketing Agreement on October 1, 1985. FCIC stated this move is a "new direction for Federal crop insurance" and is designed to improve service to our crop insurance policyholders and to utilize federal dollars more efficiently and effectively. Based on this information, what percentage of multiperil crop insurance do you anticipate being on private paper this year?

Answer: The proposed rule to terminate the Master Marketing Agreement on October 1, 1985, is being considered in order to make more effective and efficient use of taxpayer dollars. There has been a steady increase in the volume of crop insurance sold through reinsured companies. Since 1981, premium income on reinsured paper has increased from $12.8 million to an estimated $378 million for crop year 1985, an increase of 2,900 percent.

	Reinsured Companies	Master Marketers
1981	3% of Total Book of Business	$366.4 Million in Premium
1982	20%	$287.4
1983	36%	$184.1
1984	60%	$176.0
1985	70-80% (estimated)	$162.0 (estimated)

During the same time period, corresponding sales on Federal paper declined from $366.4 million to an estimated $162 million for crop year 1985, a decrease of 56 percent.

WINTER WHEAT SALES CLOSING DATE

Question: When is the sales closing date for most winter wheat policies?

Answer: 1985 winter wheat sales closing dates were established as follows:

August 31	Kansas, New Mexico, Oklahoma, Texas and part of Colorado
September 30	Connecticut, part of Wisconsin, Massachusetts, part of Montana, New York, Rhode Island, and Wyoming, Iowa and all other states insuring winter wheat
October 31	Matanuska-Susitna County, Alaska, Arizona, California, Idaho, Nevada, Oregon, Utah and Washington

September 30 is the most common date.

MASTER MARKETERS WRITING WINTER WHEAT POLICIES

Question: By terminating the Master Marketing Agreement on October 1, 1985, is it correct that we are in fact providing for the Master Marketers to continue to write winter wheat?

Answer: If proposed plans are approved, there will be no new sales of FCIC business of any 1986 crops, including winter wheat, except that sold prior to October 1, 1985.

CHALLENGE TO PRIVATE INDUSTRY FOR DELIVERY OF INSURANCE

Question: Have you received assurances from the private insurance industry that they have the capability to meet the challenge that you have given them to deliver the multiperil crop insurance program to our farmers?

Answer: Mr. Chairman, I believe that the private reinsured companies participating in the crop insurance program do have the capability to deliver crop insurance to our farmers. In just 4 years the private reinsured companies have captured an estimated 75 percent of the sales of crop insurance, with the vast majority of their clients being new participants in the crop insurance program.

On March 11, 1985 the Federal Crop Insurance Corporation announced that it is considering the feasibility of providing crop insurance solely through commercial reinsured companies. The earliest this proposal could be implemented is October 1, 1985. So, as far as the farmer is concerned, there will be no change in the delivery of crop insurance for 1985 spring planted crops.

Further, we have received assurances from the private companies that current master marketing firms will be incorporated into their future plans. Already, nearly three-fourths of the master marketers are affiliated with a private reinsured company. It is my conviction that if people want a job in the crop insurance industry, they will be able to find one. As we outlined earlier, the program is growing, and will always need good agents, managers and support personnel.

Finally, under our new reinsurance agreement, FCIC will require companies to make multi-peril crop insurance available to all eligible producers. In its oversight capacity, the Corporation will direct and require private reinsured companies to extend sales and service to applicants for crops that it insures.

ESTIMATED SAVINGS

Question: You have estimated that FCIC will initially save $37-$39 million by delivering crop insurance solely through the insurance companies and phasing out the dual delivery system. On what do you base these estimated savings?

Answer: The estimated savings are based on the 1984 budget. If FCIC were to phase out the dual delivery system in total, approximately $54 million dollars in internal overhead costs, and $8 to $10 million in systems improvement costs could be saved. Offsetting this would be $25 million in additional expense reimbursements to companies which are reinsured by FCIC.

PROGRAM EXPANSION

Question: Program expansion is of concern to many of our nation's farmers. They wish to know when coverage will be made available on crops for which there is no crop insurance coverage at present.

At this time does the FCIC have any plans or schedule to implement coverage on new crops?

Answer: FCIC at the February Board of Directors meeting gave tentative approval to developing a program on prunes and canning peaches with possible implementation for the 1986 crop year.

DEPENDENCE ON PRIVATE INDUSTRY TO DEVELOP PROGRAMS FOR COVERAGE OF NEW CROPS

Question: Will FCIC depend more on the private industry to develop programs for coverage of new crops?

Answer: Yes. The Corporation is currently developing procedures to assist private industry in developing crop programs for new crops. Currently private industry has developed programs for cranberries and certain nursery plants. Other crops, such as figs, are currently being reviewed by private industry.

USING PRIVATE CROP HAIL AND MULTIPERIL CROP INSURANCE TOGETHER

Question: It is my understanding that the private crop hail insurance has been available to our nation's farmers for many years and in fact in some areas of the country the crop hail insurance is used much more than multiperil crop insurance. When taken together, these two forms of insurance provide coverage on approximately 38% of our nation's farmland. Do you see the two programs continuing to work together to provide protection?

Answer: Yes, because they are two separate, but complementary, protection products. In areas where hail is the primary risk, the crop hail program will be the primary protection source. Where hail is not the primary risk, the multiple peril program will provide primary protection. In areas where hail is one of numerous risks, agents can better serve the farmer by using both programs to provide a comprehensive package of protection.

Current crop hail participation is about twice multiple peril participation. However, from 1980 to 1984, studies indicate that multiple peril participation increased by over 100% and crop hail increased by 50%, demonstrating that despite some competition between the two products, participation in both continues to grow.

CROP HAIL PROGRAM

Question: There has been criticism about the participation level in the multiperil crop insurance program. This, however, does not take into consideration the insurance under the private crop hail program. Do you think that there has been some misinformation on the Hill regarding these two programs and, in fact, do the two together not make the participation level much higher than has been expressed in the press?

Answer: Yes, primarily because the big picture of participation rate in crop insurance is fractured into its various parts. The generic term "crop insurance" includes multiple peril crop insurance (MPCI) sold by master marketers, MPCI sold by reinsured companies and crop hail insurance. Yet participation rates usually quoted may only include one or two of the parts, the MPCI sold by master marketers, or MPCI sold by master marketers and reinsured companies. The private crop hail program is not usually included in participation rates quoted by the federal government.

PHASE-OUT OF SUBSIDY

Question: In the proposed budget the Administration is proposing a phase-out over the next five years of the government costs for administrative and operating expenses and for premium subsidy to the farmer.

If we do eliminate the administrative and operating expenses as well as the premium subsidy are we not hitting the farmers twice in that they will have to bear the cost of the subsidy and the cost of operating the program?

Answer: Yes. However, it should be noted that coverage, not price, has been the major complaint of producers. In addition, of course, as crop insurance coverage is broadened and as more farmers utilize the program, the loss of administrative funds is spread over a greater number thus reducing what would appear at first to be a more substantial burden.

Question: This seems an unfair burden to ask of our farmers at this time of economic stress. Would it not be more appropriate to have an actuarially sound program before we move toward elimination of the premium subsidy and administrative and operating expenses?

Answer: The introduction of the Actual Production History (APH) program will provide coverages that accurately reflect a producer's yield. By reducing the adverse selection inherent in the average county yield, which overinsured many producers, the actuarial soundness of the program will be improved with minimal additional cost to the producer. For example, at the present time a 100-bushel per acre corn producer pays the equivalent of 4 bushels, or 4%, for 75% protection. If there were no appreciable change in the actuarial structure such as we anticipate under the APH program, the cost would increase to 6 bushels per acre.

REINSURED COMPANIES VS. MULTIPLE PERIL INSURANCE COMPANIES

Question: Are all reinsured companies Multiple-Peril Crop Insurance companies?

Answer: There are thousands of private insurance companies in the United States. However, only 44 are currently reinsured by FCIC and able to sell multiple-peril crop insurance. All of these companies also sell other lines of insurance. Assuming our business continues to flow to reinsured companies, it will be a major goal of the Corporation to educate additional private insurance companies to the possible benefits of participating in the crop insurance program.

TIMEFRAME FOR PAYMENT OF CLAIMS

Question: What is the normal timeframe for payment of claims?

Answer: For FCIC direct writings, 80 to 90% of the claims in the 1984 crop year were paid within 30 days of the date the insured signed the claim form.

Question: If processing the claim takes longer than a certain amount of time, do you pay interest on the claim? If so, what is the amount of time?

Answer: Starting on the 61st day from acceptance of the claim form by the Corporation, interest accrues on a daily basis. Such payments of interest were first authorized in March 1985.

BASIS FOR INCREASE IN PROGRAM PARTICIPATION

Question: In your statement, you estimate that program participation will increase from 44 million acres in 1984 to 54 million acres in 1985, and to 63 million acres in 1986. On what basis were these estimates developed?

Answer: Based on the most recent data available, 44 million acres were insured by the Corporation for crop year 1984. For crop year 1985, the Corporation is estimating that premium will reach $540 million, and that the average premium will be $10 per acre, which represents an estimated 54 million insured acres.

The Corporation also estimates that if the program is funded at $240 million in administrative and operating expenses for 1986, a premium level of $600 million can be achieved. This premium level represents an estimated 63 million insured acres.

ASCS REIMBURSABLE SERVICES

Question: For what services is ASCS reimbursed for $12.8 million?

Answer: ASCS is reimbursed for the following services:

- FCIC information and administration
- Field visits for the Actual Production History (APH)/ Individual Yield Coverage Programs (IYC)
- Establishing APH and IYC

- Acreage determinations provided FCIC
- Acreage determinations and data collected
- Sales and service and pilot counties
- Office and clerical services for district directors

FUNDING OF AGENTS' COMMISSIONS

Question: In fiscal year 1985, the Corporation will use $21 million from premium income to pay agents' commissions, and will request reimbursement from appropriations in subsequent years, according to your statement. Why do you not submit a supplemental budget request or an amended fiscal year 1986 budget request for this amount?

Answer: The Corporation has authority in the current FCI Act to use funds from premium income to pay agents' commissions. The restoration of this amount normally would be requested two years later rather than as a supplemental for the current fiscal year.

INDEMNITY ESTIMATES

Question: The budget estimated indemnities for reinsurance operations in 1985 at $290 million and a loss ratio of 1.13. More recent reports estimate indemnities at $378 million and a loss ratio of 1.43. The estimates for Master Marketers were also considerably higher in the more recent reports. How do you account for this vast difference?

Answer: Current estimates show that the reinsured company loss ratio for crop year 1984 is 1.46 compared with 1.50 for master marketers. Crop year 1984 losses have been substantially greater than originally estimated as a result of producers, largely in the Midwest, being unable to harvest their soybean, corn and grain sorghum crops due to excess moisture.

FINANCIAL STANDARDS FOR REINSURED COMPANIES

Question: Your statement indicates that financial standards have been established for commercial insurance companies being evaluated for reinsurance contracts with FCIC. Generally, what kinds of criteria will you require of these companies?

Answer: The financial criteria used to evaluate the insurance companies were published in the June 1, 1984 Federal Register. Basically, the financial ratios established by the National Association of Insurance Commissioners are used as a guideline to evaluate the company's financial position. Additionally, the insurance company rating from the "Best's Insurance Reports" or "Surety Companies Acceptable on Federal Bonds" is reviewed. Finally, other financial information may be considered in determining the acceptability of an insurance company.

REVIEW OF REINSURED COMPANIES LOSS ADJUSTMENT ACTIVITIES

Question: Your statement also refers to a review of reinsured companies' loss adjustment procedures for the first time. Were any problems found, or is their work satisfactory? What steps will be taken to encourage or require different procedures if these reviews should find problems with the current procedures? Shouldn't these reviews and changes be made prior to transferring all functions to the private sector?

Answer: The loss adjustment work performed by companies working under a reinsurance treaty with FCIC is satisfactory for the most part. There have been times where differences in the application of procedure or policy provisions have caused problems. In October of 1984, cotton loss adjustment procedures practiced by two or three of the eight companies in the high plains area of Texas resulted in an extensive review by FCIC Quality Control personnel of all companies adjusting cotton claims in the area. The findings indicated that there were differences in the methods used to stage the cotton for loss adjustment purposes. Although the problems have been solved, there are concerns that the practices carried out by certain companies will have an impact on the market shares held in the area.

There were also problems with 1983 loss adjustment practices carried out in California for speciality crops. Again, the application of procedure and policy provision as they applied to raisin and grapes resulted in numerous complaints by companies and insureds. The result of the California loss adjustment experience of 1983 was the formation of a regional National Crop Insurance Association committee to handle any differences in procedure prior to loss adjustment problems. FCIC is an active participant along with representatives of all private companies servicing crop insurance policies in California. In 1984 the FCIC Kansas City Office sent quality control personnel to California to perform reviews of all companies servicing crop insurance policies to ensure compliance with policy provisions.

The Corporation has utilized a pilot project of implementing "Joint Reviews" with reinsured companies. Representatives of the Corporation and reinsured companies performed reviews and identified problem and solution areas. The concept worked significantly.

Occasionally, reinsured companies will request an FCIC quality control person to assist on a troublesome or controversial claim. Kansas City Quality Control personnel have gone out on claims with private insurance adjusters on several occasions. The cooperative attitude of those companies have helped alleviate many loss adjustment problems.

There have been some problems concerning loss adjustment activity carried out by private insurance companies. It has been found that working with National Crop Insurance Association headquarters in Colorado Springs in the formation of regional committees can be of great benefit in keeping the problems to a minimum.

The problem resolution appears to have progressed far enough that there should be a minimum of problems as the business is transferred to the private sector, assuming the FCIC Claims Division will continue to work with and monitor claim settlements. It is the intent of FCIC to continue to review quality control and claims procedures of the private companies. Proposed plans for restructuring the Federal Crop Insurance Corporation are expected to include an expanded oversight and review capability over reinsured company operations.

REALIGNMENT OF FCIC DISTRICTS

Question: What is the reasoning behind the decision to realign FCIC districts according to premium income?

Answer: Various guidelines were considered such as geographic area, population, number of tillable acres, and other factors, but it was decided to use premium income because this was deemed to be the best criterion for determining current workload.

Question: Will phasing out Master Marketers affect this realignment?

Answer: Phasing out MMAs will affect this with the result very likely to be a need for fewer districts.

PURPOSE OF FCIC DISTRICTS DURING AND AFTER PHASE-OUT

Question: What will be the purpose of FCIC districts during and after phase-out?

Answer: The district offices will be used in assisting the monitoring and reviewing of the MPCI companies; however, this could very well be handled under some other form of organizational program than the current district alignment. During the phase-out of FCIC business, the district staff will continue to be used in their current capacity.

BENEFITS OF COMPUTERIZED RATEMAKING OPERATION

Question: In what way will a computerized ratemaking operation benefit FCIC?

Answer: Timely analysis of insurance experience is critical to developing adequate, responsive rates. The present rate making operations are largely manual. There is limited opportunity for meaningful analysis, much less timely analysis. The computerized rate making operation we are developing will not automatically produce finished rates from raw data. Instead, we are designing a system which will permit analysts to perform solid statistical analysis, interpret the significance of the data, and develop the final rates. The result will be more timely reviews of rates by crop.

FINANCIAL REPORTING SYSTEM FOR REINSURED COMPANIES

Question: Your statement states that a financial reporting system will be developed for reporting performance data for reinsured companies. How is this data now acquired?

Answer: The reinsured companies currently report financial related information to a centralized location. This location edits the data and prepares a computer generated summarized accounting report to comply with FCIC requirements. The reinsured companies report supplemental information on a manual report basis as requested by FCIC. This information includes estimated sales, number of contracts, estimated indemnities, etc. The proposed 1986 reinsurance agreement requires this information monthly. The increased frequency and additional FCIC data needs will require the development of an improved reporting system. This information will most likely be consolidated into a computer generated report for all companies.

DEBT COLLECTION

Question: There is a plan to establish a pilot program with a collection agency to enhance debt collection. Have there been major problems collecting premiums?

Answer: Although the 1980 Act calls for the collection of premium at the time insurance attaches, i.e., prior to the final planting date, the Corporation has historically deferred billing until harvest. This delay in premium collection, of between eight and twelve months, creates cash flow problems for the FCIC inasmuch as many of the claims for losses occur between planting and the time premiums are actually collected.

BENEFITS FOR FORMER PERSONNEL

Question: What benefits are paid to former personnel ($178,000 in fiscal year 1986)?

Answer: The $178,000 is an amount estimated in fiscal year 1986 for severance pay and unemployment compensation.

AGENTS' COMMISSIONS

Question: In the explanatory notes, under Administrative and Operating Expenses, the justification includes two semmingly contradictory statements. There is a $14.7 million increase in commissions for master marketers, but a $3.9 million decrease for "other" administrative expenses "due to a decrease in the premium levels by the master marketers." Why would commissions increase so drastically on lower premium income?

Answer: The apparent increase appears because agents' commissions in fiscal year 1985 were comprised of $21 million from the FCIC Revolving Fund in addition to the $3.3 million from Administrative and Operating Expenses. Fiscal year 1985 commissions thus totaled $24.3 million, while the total for agents' commissions in fiscal year 1986, with all commissions to be paid from Administrative and Operating Expenses, is $18 million, a total reduction of $6.3 million.

Questions Submitted by Senator Chiles

CROP INSURANCE PROGRAMS IN FLORIDA

Question: Would you provide me with a breakdown of the crop insurance program in Florida. What crops are covered? Extent of the coverage? Amount of protection in force?

Answer:

Crop Insured	Number of County Crop Programs	Insured Acres	Liability (Dollars)
Barley	2	0	$ 0
Citrus	25	45,745	24,698,359
Corn	52	37,109	4,671,917
Cotton	10	814	271,734
Fresh Sweet Corn	1	0	0
Fresh Tomato	4	5,746	13,621,850
Grain Sorghum	39	2,780	223,832
Oats	26	0	0
Peanuts	22	14,314	6,945,564
Peppers	4	2,191	3,785,180
Potatos	7	10,235	10,078,258
Rice	5	0	0
Soybean	28	44,980	4,718,988
Sugarcane	4	5,892	3,011,325
Tobacco	21	2,316	6,288,406
Wheat	23	12,892	925,209

PILOT PROGRAM FOR TOMATOES AND PEPPERS IN FLORIDA

Question: Would you tell me about the pilot program for tomatoes and peppers in Florida. When is it scheduled for expansion? When will this program be expanded state-wide? What are causing delays?

Answer: This pilot program was initiated in Collier, Glades, Hendry, and Lee Counties. Due to freezes with low probability, losses have been substantial, particularly for tomatoes.

The program will be expanded with the 1986 program into nine additional counties for tomatoes and six additional counties for peppers.

At this time we are studying the possibility of expanding into additional counties as outlined in response to the previous question. No date has been established to expand the program state wide.

The growing culture conditions are so diverse that expansion state wide may not be warranted.

ACTUARIAL STUDIES ON TOMATOES AND PEPPERS

Question: What is the status of actuarial studies regarding tomato and pepper insurance coverage for expanded coverage?

Answer: We are in the process of evaluating expansion of fresh market tomato and pepper insurance to new counties in Florida.

In considering expansion of the fresh market tomato program in Gadsden County we must assess risks from spot hail, wind and cold periods which can cause stunting for tomatoes planted during the March 1-March 30 period. We realize that soil conditions in the former shade tobacco area reduce some soil-related risks associated with tomato production in that area relative to southern Florida production areas. Since the acreage is only about 2 percent of Florida acreage and its production follows production from the Manatee-Ruskin area and the Charleston area, marketing risks must receive further evaluation.

In evaluating possible expansion of Florida pepper counties, we have found a diversity in cultures employed by growers. To be consistent with the current policy that requires a plastic mulch, many acres in Alachua, the county with the most acreage, would be excluded. Sumter County in spite of increased acreage the past few years is a declining production area according to one University of Florida vegetables expert. Sumter County also has a divergence of cultural practices which would preclude insurance of many acres under the current policy. An irrigation requirement would preclude a considerable percentage of the potential acreage in the six counties under study.

Volusia, Seminole, and Charlotte Counties harvest approximately 1, 3, and 3 percent, respectively, of Florida fresh market pepper production.

Handee County is considered to have risks similar to the Manatee-Hillsborough area, however, it is a decided declining production area; less than 200 acres harvested, generally, in recent years.

Management is deemed to be less intensive in the counties under study. This introduces an element of risk that needs further study.

At this time we are in the process of evaluating potential rates and potential sales before making a recommendation.

EXTENSION OF COVERAGE

Question: When will crop insurance be extended to cover other valuable crops in Florida such as strawberries, eggplants and squash among others?

Answer: The Corporation currently has no plans to extend coverage to strawberries, eggplants and squash. As noted earlier, the development of actuarially sound programs for fresh fruits and vegetables is very difficult and so we are proceeding very carefully in this area.

LENDING INSTITUTION REQUIREMENTS

Question: I have heard rumblings that some farmers may not be able to get loans from financial institutions unless their crops are covered by crop insurance. Would you tell me what a farmer is to do if he is unable to get crop insurance coverage for some of his crops? It sounds to me like he is caught between a rock and a hard place. What is the answer to this problem?

Answer: We understand that the most serious financial difficulties are faced by farmers producing the traditional crops such as grains and oilseeds. This represents a major segment of commercial agriculture. Crop insurance is available throughout the country for these crops. Although a formal actuarial structure may not be in place (because acreage traditionally has been small or non-existent), an offer of insurance will be made upon request.

Our coverage of specialty crops such as vegetables, fruits, and nuts is still in the process of expansion. We intend to continue expansion as our resources permit. We also need valid data to establish adequate and equitable rates. We must manage expansion so that the program remains viable for already covered crops.

PHASE-OUT OF FEDERAL SUPPORT

Question: You are proposing a phase-out of the subsidies for crop insurance. What effect will this have on the cost of insurance to a farmer or grower? How many farmers or growers do you anticipate will no longer be able to afford this insurance if the federal participation is removed?

Answer: While premium costs are expected to rise, we anticipate continued growth in crop insurance participation as it will remain a good value in relation to cost.

Question: Are you considering crop insurance coverage for citrus and other types of producing trees in addition to their crop?

Answer: The Corporation currently has a pilot program covering citrus trees in Texas which was initiated in 1983. Our experience has been extremely unfavorable with the loss ratio for crop year 1984. Currently estimated at about 15.0, with apparent losses for 1985 of a similar nature. We will nonetheless continue to investigate the possibility of developing an actuarially sound program.

QUESTION SUBMITTED BY SENATOR BUMPERS

ESTABLISHMENT OF OFFICE IN ARKANSAS

Question: The first bill I introduced in the new Congress this year is a bill to create a separate FCIC field office in Arkansas. I believe my bill, S. 81, is justified because Arkansas is one of the largest states in terms of FCIC activity -- units insured, premiums and claims. For the record, six states -- Illinois, Iowa, Nebraska, Missouri, North Dakota and South Dakota -- currently have their own FCIC offices, and the activity in Arkansas matches or exceeds that in many of these states as well as that of several multi-state districts. When is the FCIC going to establish an office in Arkansas?

Answer: Arkansas is one of our highest premium earning states. As such, the Corporation has taken some recent actions that we believe have provided the insured producers of Arkansas a vastly improved crop insurance program.

Prior to crop year 1984, the Jackson, Mississippi Field Operations Office had administrative jurisdiction over the crop insurance program in Arkansas. Due to the rapid expansion of the program in the Southeast, it became necessary to reduce the crush of paper flowing through the Jackson office. So, the Corporation placed Arkansas under the administrative jurisdiction of our Nashville, Tennessee Field Operations Office (FOO). Of the Corporation's 18 FOO's, the Nashville office was, and continues to be one of the most capably administered. In fact, our experience in 1984 seems to validate the move, as complaints about the service our insured producers are receiving has decreased dramatically.

It is important to realize that while the paperflow function moved to Nashville, the producers' personal contacts with the Corporation - the District Directors and private sales representatives - remained in Arkansas. These are the people who are extremely familiar with southern crops, cultural growing practices, causes of loss, and the producers.

Until 1983, Arkansas farmers with FCIC contracts were served by two district offices. The addition of two district offices were authorized in 1983 for Arkansas in order to provide a higher level of support to the contracts being administered by FCIC. Each district office is authorized a director, a quality control and training specialist, and two or more loss adjustment supervisors.

As a percentage of premium income, FCIC's share of the business in Arkansas has declined 33 percent since 1982 (See attached table). Total crop insurance in force in Arkansas has been relatively stable in the 1982-1984 period, but, the share of business on private company contracts has increased significantly.

ARKANSAS PREMIUM INCOME

Year	Total Combined Premium Income Dollars	FCIC Premium Income Dollars	Percent
1984	$14.7 M	$5.4 M	37
1983	$14.2 M	$13.3 M	94
1982	$17.6 M	$16.9 M	96
1981	$15.8 M	$15.6 M	99
1980	$1.6 M	$1.6 M	100
1979	$317,000	$317,000	100

Another factor that must be considered is the future of the Corporation in the servicing of crop insurance sold by Master Marketers. As announced on March 11, 1985, FCIC is considering the feasibility of providing crop insurance solely through commercial reinsured companies for the 1986 crop year. Nationwide, about 75 percent of the 1985 crop insurance business is expected to be written by private commercial insurance companies reinsured by FCIC.

We feel it is not advisable to consider any expansion of field offices because of the above reasons.

RURAL ELECTRIFICATION ADMINISTRATION

STATEMENT OF HAROLD V. HUNTER, ADMINISTRATOR, RURAL ELECTRIFICATION ADMINISTRATION

ACCOMPANIED BY JACK VAN MARK, DEPUTY ADMINISTRATOR, RURAL ELECTRIFICATION ADMINISTRATION

PREPARED STATEMENT

Senator COCHRAN. Mr. Hunter, we appreciate your being here. We already introduced you and the Under Secretary. We ask you to proceed in presenting your statement to the committee. We will include your entire statement as you submitted it to the committee. We thank you for that statement.

You can proceed to summarize or make any comments that you choose at this point.

[The statement of Mr. Hunter and a brief history of rural electrification and telephone programs follow:]

STATEMENT OF HAROLD V. HUNTER

Mr. Chairman and members of the Committee, it is a pleasure to appear once again before this Committee to discuss the Rural Electrification Administration's, (REA) annual budget and program proposals. I have a short statement this afternoon and then I would be happy to answer any questions that you might have.

The Rural Electrification Administration is celebrating it's 50th anniversary this year. It has been a truly remarkable program. Its loan and loan guarantee programs have provided around $60 billion to rural electric and telephone utilities. Virtually everyone in rural areas has reliable electric and telephone services, in some cases at lower cost than their city neighbors. Collectively, REA electric borrowers serve 11 percent of the people in this country; REA telephone borrowers 5 percent.

During 1983, electric borrowers' revenues totalled $15.7 billion, $6.0 billion, or 62 percent more than in 1980. More significantly, their net margins totalled $914 million, an increase of $517 million, or 130 percent more than the 1980 level. In 1980, there were 67 electric borrowers with deficit net margins. By 1983, that figure was down to 26. The downward trends in equity levels for electric borrowers has been reversed. Adjusting for inflation, the price per kilowatthour of electricity on REA-financed systems is still less than it was 20 years ago.

Telephone borrowers' revenues totalled $2.8 billion in 1983, an increase of $1.0 billion, or 57 percent over 1980. Their net income or margins were almost $400 million, an increase of more than 75 percent from 1980. As in the electric program, borrowers financial ratios have shown improvement over the past four years. Over 85 percent of the subscribers on REA-financed telephone systems have private-line, one-party service.

I mention these things to point out to you that not only has the program suceeded in bringing quality electric and telephone service to rural America, but also that the borrowers themselves are, by and large, strong financially, with sound management, and are well accepted by other sectors of the utility industry and in the private investment community.

The program achievements are a monument to those in Congress, both past and present, who conceived it and nurtured it, to the people who served in REA during the past 50 years, and most especially, to the efforts of the people in rural America who participated in this self-help program.

The Fiscal Year 1986 Budget that we are proposing recognizes this strength and this acceptance. It reflects the fact that government assistance is not needed to the degree it was previously. Many people in the program recognize this and believe this. They are willing to work with us to keep the rural electric and telephone systems strong, viable organizations while, at the same time, reducing the dependence on the Federal Treasury as the main source of financing and thereby contributing to a reduction in the Federal deficit.

The 1986 Budget Proposals

Loan Programs

We are again proposing for the electric program a change of loan ratios and criteria. These changes will allow better targeting of the insured funds to borrower needs. The number and amount of new applications being received is dramatically less than previous years experience. Between these two factors, the 1986 budget proposal of $500 million will be adequate.

Also due to reduced total need and increased use private capital, the budget also proposes $300 million for electric loan guarantee commitments, mainly to cover cost overruns on projects already begun.

For the telephone program, we are requesting $75 million for insured loans and $185 million for the Rural Telephone Bank. No funds for telephone loan guarantee commitments are being requested for 1986.

No appropriation is being proposed for the capitalization of Rural Telephone Bank stock. With borrowing authority from Treasury of up to 20 times its' paid-in-capital and retained earnings, the Bank has a virtually limitless supply of funds.

We do not feel that these levels will result in a severely adverse impact on REA borrowers. Substantial amounts of private capital are available to supplement REA loans. During fiscal year 1984, electric borrowers took advantage of these sources to the total of over $650 million.

Reduced REA insured loan levels will help stabilize the RETRF while assuring that funds are available for those rural electric and telephone systems that really need help.

Consistent with the 1986 proposals, we are requesting rescission of the $30 million of the Class A Stock of the Rural Telephone Bank, authorized during fiscal year 1985. These funds are not needed, because, as I mentioned earlier, the Bank has virtually unlimited authority to borrow from Treasury.

We are also proposing rescission of the $216 million in direct appropriations made available in 1985 for reimbursement to the REA revolving fund. During 1983, the year on which the appropriation is based, the revolving fund actually had a net cash income of more than $90 million, hence there is no need for a reimbursement.

The REA Administration Budget

The 1986 Budget request $28,392,000 for administrative costs of the Agency. We feel that this level will be adequate to carry out the programs during 1986.

As is normally the case, the budget contains long-range proposals for the Congress to consider. This year, the long-range proposals include a recommendation to gradually phase-out REA and RTB lending activities by 1990. Provision is made however, for the continuation of appropriate staffing levels necessary for the servicing of the $60 billion in loans and loan guarantees outstanding.

These proposals are consistent with the President's goal of reduction in the private sector's financial dependence on the Government, and with the goal of financial integrity of the revolving fund. The national economic recovery which we are experiencing entails some sacrifice from all sectors of the economy. The rural electric and telephone systems should be no exceptions. In the end, all sectors of the American economy will benefit by the reduced Federal presence in the market place. REA borrowers, as a whole, will ultimately become stronger financially as they become more independent of the Federal Government.

I feel the President's 1986 Budget proposals for the REA programs are worthy of your consideration. I urge you to support them.

This is the end of my prepared remarks. I will be happy to answer any questions you might have.

A BRIEF HISTORY OF THE RURAL ELECTRIFICATION AND TELEPHONE PROGRAMS

HISTORY

The Rural Electrification Administration (REA) is a credit agency of the U. S. Department of Agriculture which assists rural electric and telephone organizations in obtaining the financing required to provide electric and telephone service in rural areas. These essential services help improve the quality of life for people who live, work, or do business throughout rural America. Financial assistance may include (a) loans from REA, (b) guarantees of loans made by others, and (c) REA approval of security arrangements which permit the borrower to obtain financing from other lenders without a guarantee.

REA was first established by Executive Order 7037 on May 11, 1935, as part of a general program of unemployment relief. It soon became clear, however, that the task of extending central station electric service to rural areas required very specialized skills (engineering, management, etc.) that would be difficult to attract if REA operated under the constraints of the unemployment relief authorization. REA was given its own statutory authorization by the Rural Electrification Act of May 20, 1936. It became a part of the U. S. Department of Agriculture on July 1, 1939.

Federal support was needed to electrify rural America because most of the established utilities served high density areas and did not extend lines to farmers and other rural residents because such investments were not considered to be feasible.

When Congress established REA, its purpose was to assure that funds would be available for rural electrification. Loans were made at interest rates that fluctuated with the cost of money to the Government. It was not until 1944 that Congress established a fixed interest rate of two percent, which, at that time, was the approximate cost of money to the Government. As time went by and interest rates rose, the subsidy associated with REA loans grew. The performance of the difficult tasks involved with the initial organizing and constructing of rural electric systems was made possible by the availability of capital from REA, innovative construction techniques and the establishment of cooperatives--not by subsidized interest rates.

The purpose of REA was expanded in 1949 when REA was authorized to loan funds for telephone service in rural areas. As in the case of electricity, it became clear that rural residents would not have access to adequate and dependable telephone service unless Federal suppport was provided. Both the rural telephone and rural electric programs of REA have been successful in achieving their goals.

During the late 1960's and early 1970's, rural electric and telephone leaders came to realize that (a) their capital needs were growing at a very rapid rate and would very likely continue to grow, (b) it was no longer reasonable to expect the Government to meet all of their growing capital needs, and (c) they had developed sufficient financial strength to obtain a portion of their capital needs from private sources. For these reasons, supplemental sources of financing were developed for both rural electric and telephone utilities.

The National Rural Utilities Cooperative Finance Corporation (CFC) was formed in 1969 by the rural electric cooperatives. It obtains funds from the private credit markets for its loans to electric systems. As of December 31, 1983, CFC had provided more than $2.3 billion in long-term loans to its membership, which includes 933 systems. In addition to CFC, rural electric systems obtain loan funds from the Banks for Cooperatives and other private sources.

The Rural Telephone Bank (RTB) was established in 1971 by Public Law 92-12 which amended the Rural Electrification Act. It is the primary supplemental source of financing for the growing capital needs of rural telephone systems.

The Rural Telephone Bank is managed by a 13-member board of directors. The Administrator of REA serves as Governor of the Bank until conversion to private ownership, control, and operation. This will take place when 51 percent of the Class A stock issued to the United States and outstanding at any time after September 30, 1995, has been fully redeemed and retired. The Bank board holds at least four regularly scheduled meetings a year. Activities of the Bank are carried out by REA employees and the Office of the General Counsel of the U. S. Department of Agriculture.

In 1973, a major amendment to the Rural Electrificaton Act established the "Rural Electrification and Telephone Revolving Fund" (RETRF) for the purpose of making loans to REA electric and telephone borrowers. The amended Act established that loans to be made from the RETRF would be at a standard rate of five percent instead of the two percent rate at which REA loans had previously been made. The two percent rate was retained as a special rate for borrowers that met criteria specified in the Act. It was also available, at the Administrator's discretion, for hardship cases.

In addition to establishing the RETRF, and increasing the interest rate on REA loans, the 1973 amendment authorized REA to guarantee loans made by other lenders. Today these loan guarantees account for most of the loan funds obtained by electrification borrowers.

The 1973 Amendment to the Act states it is the policy of the Congress that "rural electric and telephone systems should be encouraged and assisted to develop their resources and ability to achieve the financial strength needed to enable them to satisfy their credit needs from their own financial organizations and other sources."

In 1981, Congress further amended the RE Act by eliminating the special two percent interest rate on loans to rural electric and telephone systems. Such utilities now receive loans at five percent from the RETRF, as do other borrowers. Exceptions to the five percent rate may still be made at the discretion of the REA Administrator where there is a finding of hardship.

CHRONOLOGY OF LEGISLATIVE CHANGES

RURAL ELECTRIFICATION ACT OF 1936
7 U.S.C. 901-950b

1935. The Rural Electrification Administration was created by Executive Order 7037 of May 11 under authority of the Emergency Relief Appropriation Act of 1935, approved April 8, 1935, (49 Stat. 115).

1936. Statutory provision for the agency was made in the Rural Electrification Act (RE Act) of 1936, approved May 20 (49 Stat. 1363; 7 U.S. Code, Chapter 31).

1938. Title IV of the Work Relief and Public Works Appropriation Act of 1938, approved June 21 ("RE Act of 1938," 52 Stat. 818) authorized further borrowing from the Reconstruction Finance Corporation and added a requirement that borrowers from REA agree to use materials and supplies produced in the United States.

1939. REA became part of the Department of Agriculture under Reorganization Plan II, effective July 1.

1944. Title V of the Department of Agriculture Organic Act of 1944, approved September 21 (58 Stat. 739) liberalized the terms of REA loans and removed the time limitation from its lending program.

1944. On December 23, the Rural Electrification Act was further amended to authorize REA to refinance certain rural electrification obligations owed to the Tennessee Valley Authority (58 Stat. 925).

1947. The Department of Agriculture Appropriation Act, 1948, approved July 30, (61 Stat. 546) further amended the Rural Electrification Act by transferring from the Reconstruction Finance Corporation to the Secretary of the Treasury the authority to make loans to REA.

1948. On June 29, the Rural Electrification Act was again amended to authorize REA to refinance certain additional rural electrification obligations owed to the Tennessee Valley Authority (62 Stat. 1070).

1949. On October 28, the Rural Electrification Act was further amended to authorize REA to make loans for the purpose of furnishing and improving rural telephone service (63 Stat. 948).

1955. On June 15, the Rural Electrification Act was amended by revising the formula governing the allotment of electrification loan funds (69 Stat. 131).

1962. On October 23, the Rural Electrification Act was amended by broadening the definition of telephone service (76 Stat. 1140).

1971. On May 7, the Rural Electrification Act was amended to establish a Rural Telephone Account and the Rural Telephone Bank (85 Stat. 29; 7 U.S.C. 931-950b).

1972. On June 30, the Rural Electrification Act was amended to authorize the Secretary of the Treasury to purchase Telephone Bank debentures (86 Stat. 390; 7 U.S.C. 921b).

1973. On May 11, the Rural Electrification Act was amended to establish a revolving fund for insured and guaranteed loans under Title III (87 Stat. 65; 7 U.S.C. 931-940).

1975. On November 4, the Rural Electrification Act was amended to expressly authorize the assignment of REA guarantees to the extent provided in contract of guarantee, to clarify the incontestability of the Government guarantee, and to specifically require justification of budget estimates. (89 Stat. 677; 7 U.S.C. 936; 938; and 906.)

1976. On April 21, the "Fiscal Year Adjustment Act," amended the Rural Electrification Act to reflect necessary changes in laws because of the October-September fiscal year. (90 Stat. 375; 31 U.S.C. 701 note.)

1976. On October 20, the Rural Electrification Act was amended to correct unintended inequities in the interest rate criteria and to transfer the unobligated balance of the 1973 loan authorizations to the Rural Electrification and Telephone Revolving Fund, (90 Stat. 2701; 7 U.S.C. 931; 935.)

1977. On August 4, the "Department of Energy Organization Act," added section 16 to title 1, to require the Administrator when making or guaranteeing generation or transmission loans to consider general criteria published by the Secretary of Energy. (91 Stat. 608; 7 U.S.C. 916.)

1981. On August 13, the "Omnibus Reconciliation Act of 1981," amended the Rural Electrification Act: (1) to establish a five percent interest rate, with certain exceptions, for loans from the revolving fund, and (2) to require the Federal Financing Bank to make a loan under an REA guarantee if requested by a borrower with such a guarantee. (95 Stat. 379; 7 U.S.C. 935, 936.)

1981. On December 22, the "Agriculture and Food Act of 1981," amended the Rural Electrification Act to extend for another ten years the authorization for Federal stock purchase in the Rural Telephone Bank. (95 Stat. 1347; 7 U.S.C. 946.)

Public Law 97-35
97th Congress

An Act

To provide for reconciliation pursuant to section 301 of the first concurrent resolution on the budget for the fiscal year 1982.

Aug. 13, 1981
[H.R. 3982]

SHORT TITLE

SECTION 1. This Act may be cited as the "Omnibus Budget Reconciliation Act of 1981".

Omnibus Budget Reconciliation Act of 1981.

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PART 4—RURAL ELECTRIFICATION ADMINISTRATION PROGRAMS

RURAL ELECTRIFICATION ACT AMENDMENTS

SEC. 165. (a) Section 305(b) of the Rural Electrification Act of 1936 (7 U.S.C. 935(b)) is amended to read as follows:

Insured loans, interest rates.

"(b) Insured loans made under this title shall bear interest at 5 per centum per annum, except that the Administrator may make insured loans to electric or telephone borrowers at a lesser interest rate, but not less than 2 per centum per annum, if, in the Administrator's sole discretion, the Administrator finds that the borrower—

"(1) has experienced extreme financial hardship; or

"(2) cannot, in accordance with generally accepted management and accounting principles and without charging rates to its customers or subscribers so high as to create a substantial disparity between such rates and the rates charged for similar service in the same or nearby areas by other suppliers, provide service consistent with the objectives of this Act.".

(b) Section 306 of the Rural Electrification Act of 1936 (7 U.S.C. 936) is amended by—

(1) inserting immediately after the second sentence the following: "With respect to guarantees issued by the Administrator under this section, on the request of the borrower of any such loan so guaranteed, the loan shall be made by the Federal Financing Bank and at a rate of interest that is not more than the rate of interest applicable to other similar loans then being made or purchased by the Bank."; and

(2) striking our "a loan insured at the standard rate" in the fourth sentence and inserting in lieu thereof "an insured loan".

(c) Section 307 of the Rural Electrification Act of 1936 (7 U.S.C. 937) is amended by striking out "a loan insured at the standard rate" and inserting in lieu thereof "an insured loan".

7 USC 935 note.

(d) The amendments made by subsection (a) of this section shall apply to loans the applications for which are received by the Rural Electrification Administration after July 24, 1981.

PUBLIC LAW 97-98—DEC. 22, 1981 95 STAT. 1213

Public Law 97-98
97th Congress

An Act

To provide price and income protection for farmers, assure consumers an abundance of food and fiber at reasonable prices, continue food assistance to low-income households, and for other purposes.

Dec. 22, 1981
[S. 884]

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That this Act, with the following table of contents, may be cited as the "Agriculture and Food Act of 1981".

Agriculture and Food Act of 1981.
7 USC 1231 note.

*****

RURAL TELEPHONE BANK AMENDMENT

SEC. 1607. Section 406 of the Rural Electrification Act of 1936 (7 U.S.C. 946) is amended by—

(1) inserting in the second sentence of subsection (a) "but not later than fiscal year 1991" after "thereafter", and striking out "$300,000,000" and inserting in lieu thereof "$600,000,000"; and

(2) striking out in the first sentence of subsection (c) "September 30, 1985" and inserting in lieu thereof "September 30, 1995", and striking out "and after the amount of class A and class B stock issued totals $400,000,000,".

PROGRAM ACCOMPLISHMENTS

Extending and Improving Service

REA's programs have been very successful in extending electric and telephone service to persons in rural areas. By 1953 more than 90 percent of all farms in the U.S. had electricity; for telephone service, the 90 percent mark was passed in 1976.

Chart C-1 PERCENT OF FARMS WITH ELECTRIC AND TELEPHONE SERVICE

U.S. TOTALS

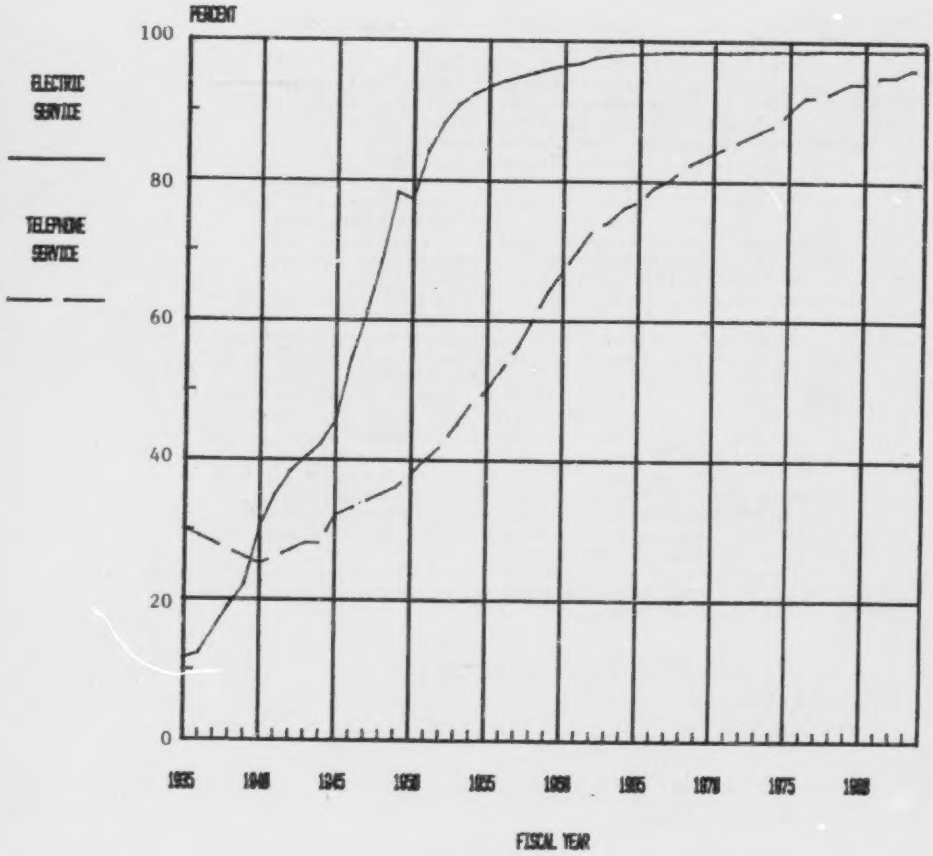


TABLE C-1 Percent of Farms with Electric and Telephone Service

Fiscal Year	Electricity	Telephone
1935	11.6%	---
1936	12.3	---
1937	15.8	---
1938	19.1	---
1939	22.1	---
1940	30.4	25%
1941	34.9	---
1942	38.3	---
1943	40.3	---
1944	42.2	---
1945	45.7	32
1946	54.3	---
1947	61.0	34
1948	68.6	35
1949	78.2	36
1950	77.2	38
1951	84.2	40
1952	88.1	42
1953	90.8	45
1954	92.3	48
1955	93.4	50
1956	94.2	53
1957	94.8	56
1958	95.4	60
1959	96.0	64
1960	96.5	67
1961	96.8	70
1962	97.6	73
1963	97.9	74
1964	98.1	76
1965	98.2	77
1966	98.3	79
1967	98.4	80
1968	98.4	82
1969	98.4	83
1970	98.4	84
1971	98.4	85
1972	98.5	86
1973	98.5	87
1974	98.6	88
1975	98.6	90
1976	98.6	92
1977	98.7	92
1978	98.7	93
1979	98.7	94
1980	98.7	94
1981	98.7	95
1982	98.7	95
1983	98.8	96
1984	98.8	96

In addition to financing the extension of electric and telephone service to rural areas, REA has provided credit to rural telephone utilities for system improvements that have dramatically upgraded the quality of telephone service in rural America.

Before the REA telephone program, rural telephone service was often antiquated and unreliable--even where it was available.

Today modern and reliable telephone service is available for people who live, work or do business in rural areas. The availabiltiy of modern communications, systems has improved the quality of life of rural people and has strengthened their local economies. Improvement continues as more rural residents receive single party service.

Chart C-2 GRADES OF SERVICE PROVIDED TO SUBSCRIBERS SERVICE BY REA TELEPHONE BORROWERS

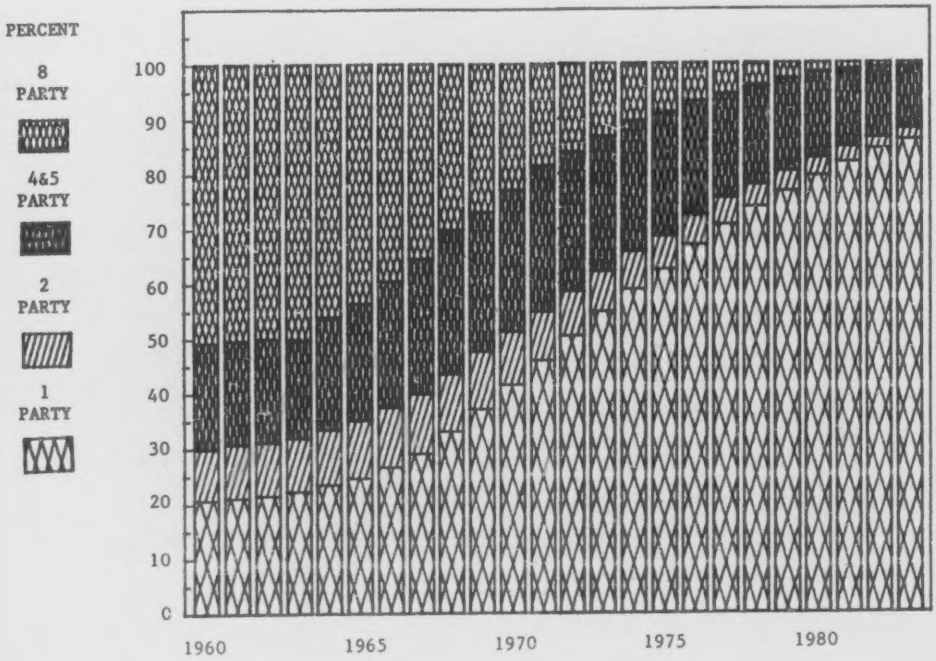


TABLE C-2 Number of Subscribers Served by REA Telephone Borrowers, by Grade of Service**

(Subscribers in thousands)

Year	One Party		Two Party		Four and Five Party		Eight Party*	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent
1960	234.0	20.5	108.1	9.5	219.4	19.2	580.5	50.8
1961	269.6	20.9	124.3	9.6	246.9	19.1	650.7	50.4
1962	306.2	21.6	136.8	9.6	266.1	18.7	710.8	50.1
1963	338.2	22.2	147.6	9.7	278.4	18.3	759.2	49.8
1964	381.2	23.4	165.0	10.2	330.4	20.3	750.0	46.1
1965	428.7	24.8	182.0	10.5	362.7	21.0	752.9	43.7
1966	486.5	26.6	199.2	10.9	418.6	22.9	721.5	39.6
1967	567.1	29.2	211.8	10.9	472.4	24.3	693.0	35.6
1968	680.0	32.9	223.8	10.8	537.8	26.0	625.4	30.3
1969	810.7	37.1	227.5	10.4	560.1	25.7	586.3	26.8
1970	972.3	41.6	227.4	9.8	598.7	25.6	536.1	23.0
1971	1,117.2	46.0	217.0	8.9	642.5	26.5	452.2	18.6
1972	1,298.1	50.4	212.5	8.3	655.1	25.4	409.2	15.9
1973	1,489.9	54.7	200.4	7.3	675.2	24.8	359.5	13.2
1974	1,717.0	58.8	196.9	6.8	695.8	23.8	309.4	10.6
1975	1,909.2	62.7	183.3	6.0	685.2	22.5	267.6	8.8
1976	2,205.2	67.1	166.8	5.1	682.0	20.8	229.2	7.0
1977	2,545.6	70.7	165.2	4.6	688.7	19.1	199.6	5.6
1978	2,861.4	73.8	162.3	4.2	700.2	18.1	153.1	3.9
1979	3,122.8	76.7	153.0	3.7	691.1	17.0	104.8	2.6
1980	3,383.1	79.4	136.1	3.2	669.7	15.7	72.4	1.7
1981	3,582.6	81.9	120.9	2.7	615.6	14.1	54.9	1.3
1982	3,826.7	84.2	103.0	2.3	574.1	12.6	41.8	0.9
1983	4,137.8	85.8	97.2	2.0	551.3	11.4	36.7	0.8

* Includes service stations (switchers) which represent less than 1 percent of the total number of subscribers.

** To provide a more accurate representation, data for borrowers with total REA and RTB loans and REA loan guarantee commitments of less than 20 percent of their total assets have been excluded beginning in 1971.

Meeting the Growing Demand for Service

Rural electric and telephone systems have been able to meet an ever increasing demand for service. Each year the number of households served by REA electric and telephone borrowers has increased. In the early years this growth was mainly due to service being extended to households that had never before had electricity or telephones. More recently the growth is primarily because of the rapid population increases that have occurred in rural America--particularly in "sunbelt" and western states.

Chart C-3

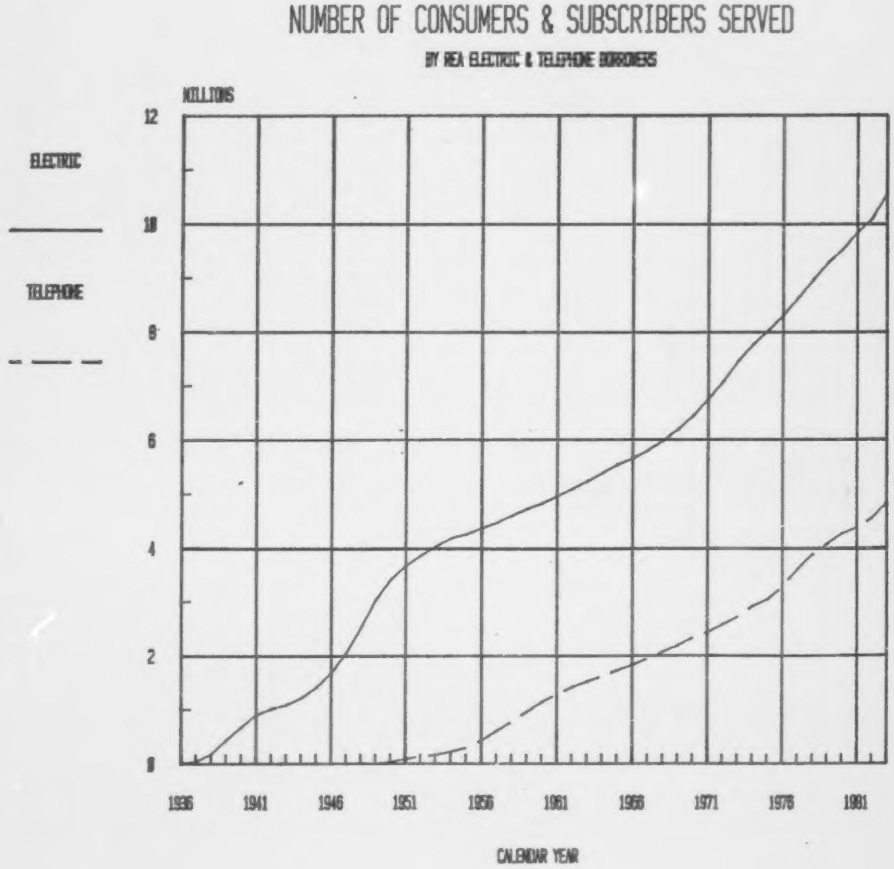


TABLE C-3

Number of Consumers and Subscribers Served by REA Electric and Telephone Borrowers (in Thousands)

Calendar Year	Electric Consumers	Telephone Subscribers
1935	---	---
1936	7.5	---
1937	43.9	---
1938	176.4	---
1939	435.6	---
1940	674.5	---
1941	902.3	---
1942	1,012.3	---
1943	1,087.8	---
1944	1,216.8	---
1945	1,408.9	---
1946	1,683.9	---
1947	2,046.1	---
1948	2,518.5	---
1949	3,040.4	---
1950	3,413.4	29.1
1951	3,666.0	86.9
1952	3,858.4	131.4
1953	4,024.8	157.4
1954	4,174.4	215.8
1955	4,251.3	296.2
1956	4,361.9	432.0
1957	4,466.4	604.7
1958	4,596.3	778.5
1959	4,721.6	958.9
1960	4,825.8	1,142.0
1961	4,955.6	1,291.5
1962	5,095.0	1,419.9
1963	5,237.9	1,523.4
1964	5,386.1	1,626.6
1965	5,541.5	1,726.4
1966	5,652.8	1,825.9
1967	5,806.0	1,944.3
1968	5,986.1	2,067.0
1969	6,197.0	2,184.6
1970	6,442.3	2,334.5
1971	6,747.7	2,428.9
1972	7,076.2	2,574.8
1973	7,457.1	2,725.0
1974	7,767.8	2,919.1
1975	8,017.7	3,045.3
1976	8,311.8	3,283.2
1977	8,630.8	3,599.1
1978	8,962.5	3,877.1
1979	9,275.1	4,072.7
1980	9,523.6	4,262.4
1981	9,844.3	4,374.9
1982	10,096.5	4,545.6
1983	10,555.4	4,823.1

Note: The number of consumers and subscribers served is approximately equal to the number of households and business establishments served.

In the case of electricity, the strong rural demand that has historically been experienced and met by rural electric utilities can be explained in part by the fact that alternatives to electricity are not available in many nonmetropolitan areas. For this reason electricity is used for home heating and major appliances to a greater extent in nonmetro than in metro areas. In the case of new housing, electricity is being used to an increasing extent.

Chart C-4

ELECTRICITY USE FOR MAJOR APPLIANCES

METRO VS. NON-METRO

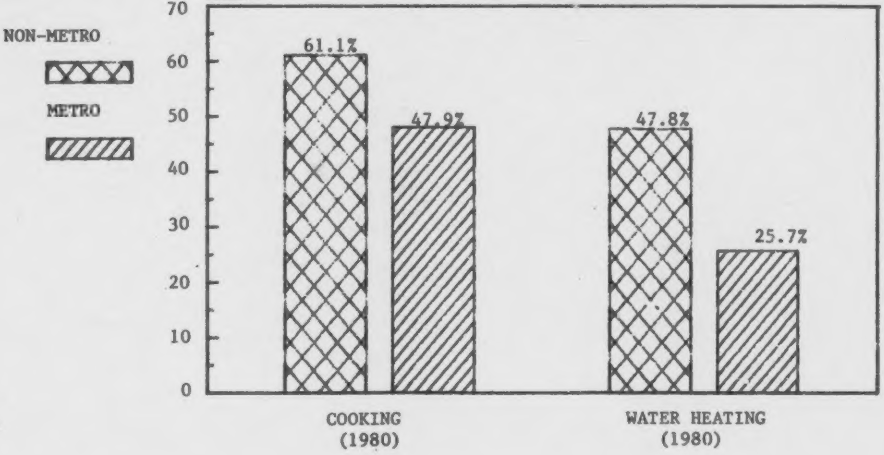
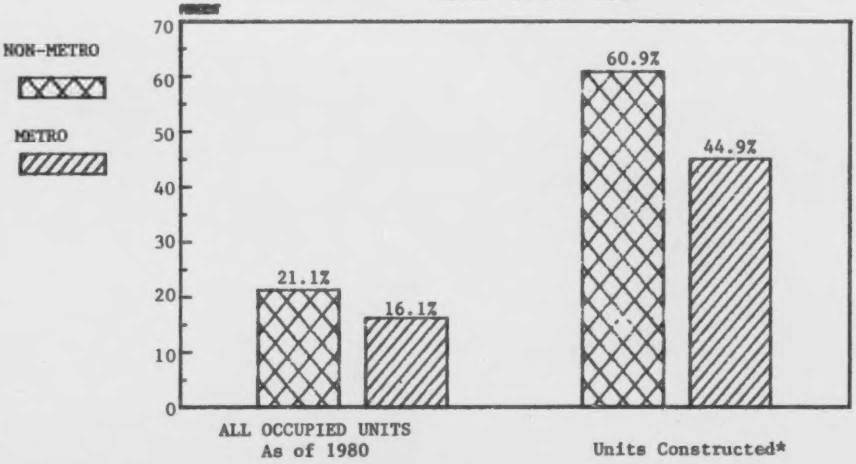


Chart C-5

ELECTRICITY USE FOR HOME HEATING

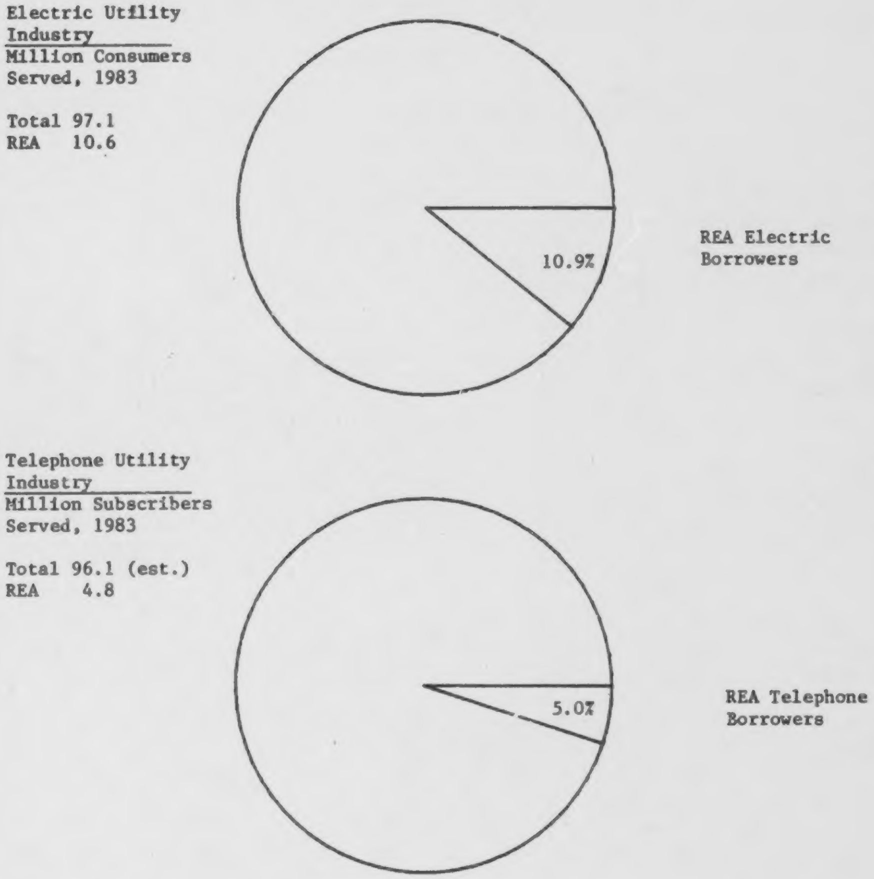
METRO VS. NON-METRO



*Privately owned single family

Today the rural electric and telephone utilities that receive financing from REA have developed into strong business organizations. Although not large when compared with many urban utilities, they are vital components of their respective industries.

Chart C-6 Percent of Electric Consumers and Telephone Subscribers Served by REA Borrowers



LOAN STATISTICS

REA telephone borrowers have received a greater amount of their financing needs from REA loans than from otehr sources. These REA loans are supplemented by loans from the Rural Telephone Bank and REA guarantees of loans from other sources--mainly the Federal Financing Bank.

Chart D-1

SOURCES OF LONG-TERM FINANCING APPROVED

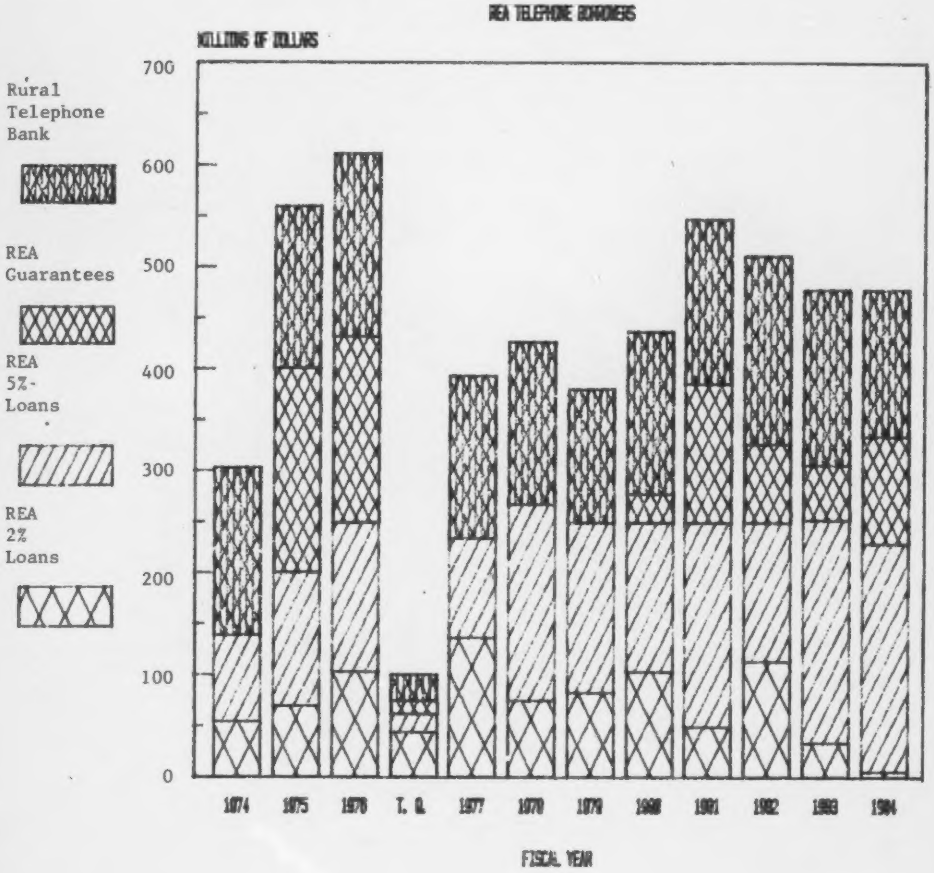


TABLE D-1

Long-Term Financing Approved by Fiscal Year REA Telephone Borrowers (in millions)

Fiscal Year	REA 2%	REA 5%	Non-REA REA Guarantee Commitments	Non-REA Rural Telephone Bank	Total
1971	$125.0	---	---	---	$125.0
1972	133.7	---	---	$ 91.0	224.7
1973	90.0	$ 55.0	---	150.0	295.0
1974	55.2	84.8	---	163.0	303.0
1975	70.0	129.9	$200.0	160.2	560.1
1976	103.8	146.3	181.6	180.1	612.8
TQ	43.1	19.4	12.3	26.5	101.2
1977	136.5	96.7	---	160.3	393.6
1978	74.7	191.9	---	159.2	425.8
1979	81.6	168.3	---	130.8	380.7
1980	103.2	146.9	27.4	160.0	437.5
1981	49.7	200.1	136.4	159.9	546.1
1982	113.3	136.0	77.0	184.8	511.1
1983	33.1	217.6	54.0	171.6	476.3
1984	5.8	222.8	105.1	143.0	476.7

Until the 1973 amendment to the Rural Electrification Act, virtually all financing to REA electric borrowers was supplied by direct REA loans at an interest rate of two percent. Since 1973 the amount of financing received by rural electric systems has increased greatly and most of this financing has been provided by non-REA sources, primarily the Federal Financing Bank (FFB), with an REA guarantee, at FFB's market rate of interest. During Fiscal Year 1984, electric borrowers' financing needs were less than in any year since 1976, nevertheless, nearly two-thirds of those needs were still supplied by non-REA sources.

Chart D-2

SOURCES OF LONG-TERM FINANCING

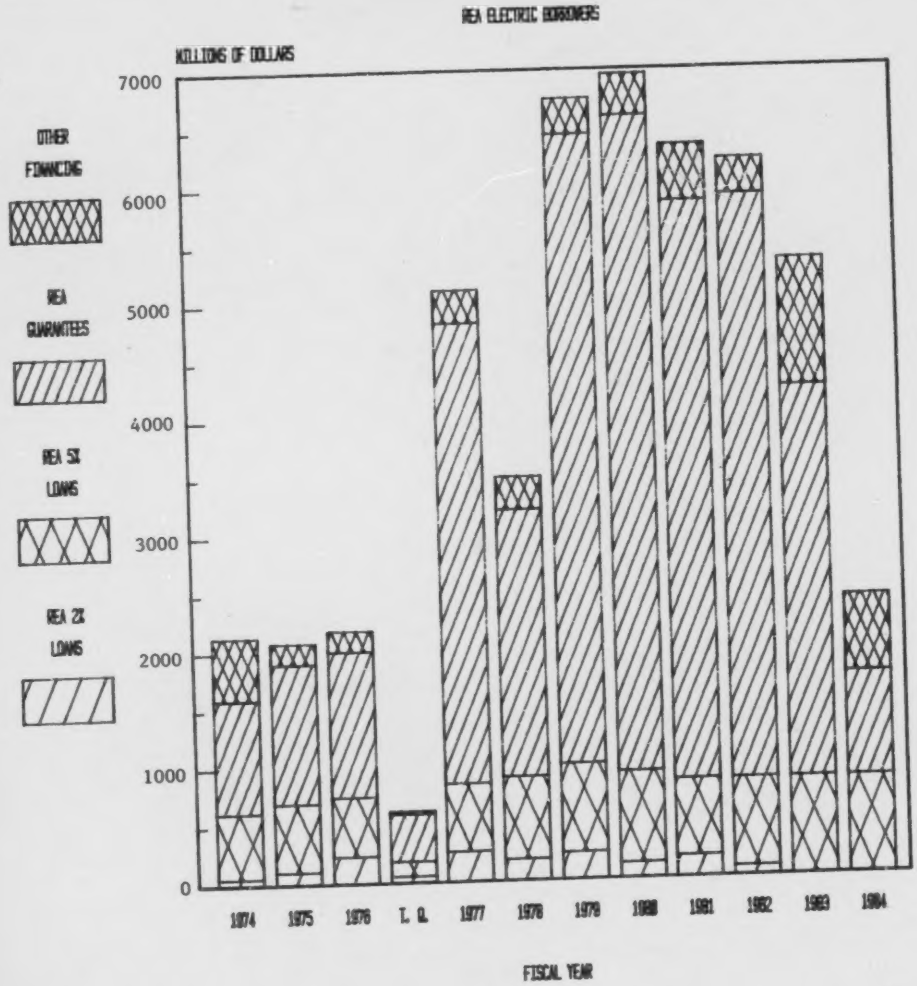


TABLE D-2

Long-Term Financing Approved
by Fiscal Year
REA Electric Borrowers
(in millions)

	REA		Non-REA		
Fiscal Year	2%	5%	REA Guarantee Commitments	Other Financing	Total Long-Term Financing Approved During FY
1969	$344.8	---	---	---	$ 344.8
1970	345.0	---	---	---	345.0
1971	361.8	---	---	$ 12.8	374.6
1972	438.3	---	---	168.4	606.7
1973	235.1	$382.8	---	107.6	725.5
1974	65.5	553.1	$ 974.4	533.9	2,126.9
1975	105.0	595.0	1,206.3	165.0	2,071.3
1976	222.5	527.5	1,241.5	198.4	2,189.9
TQ	47.2	140.3	403.9	31.9	623.3
1977	268.2	581.8	3,985.5	278.3	5,113.8
1978	176.2	723.8	2,309.1	276.3	3,485.4
1979	222.9	777.1	5,429.7	311.9	6,741.6
1980	142.5	782.5	5,660.1	368.3	6,953.4
1981	178.3	671.7	4,994.9	503.9	6,348.8
1982*	77.8	772.2	5,064.6	304.7	6,219.3
1983*	2.7	847.3	3,388.3	1096.5	5,334.8
1984*	12.6	837.4	897.2	656.5	2,403.7

*Does not include funds made available through the provisions of the Economic Recovery Tax Acts ($629.2 million in F.Y. 1982, $526.4 million in F.Y. 1983 and $46.1 million in F.Y. 1984).

REA electric distribution borrowers receive most of their financing from REA at a five percent interest rate. The remainder is obtained from REA at interest rates as low as two percent (a very small amount since the 1981 amendment to the RE Act) and from non-REA sources such as the National Rural Utilities Cooperative Finance Corporation (CFC) and the Bank for Cooperatives.

SOURCES OF LONG-TERM FINANCING

Chart D-3

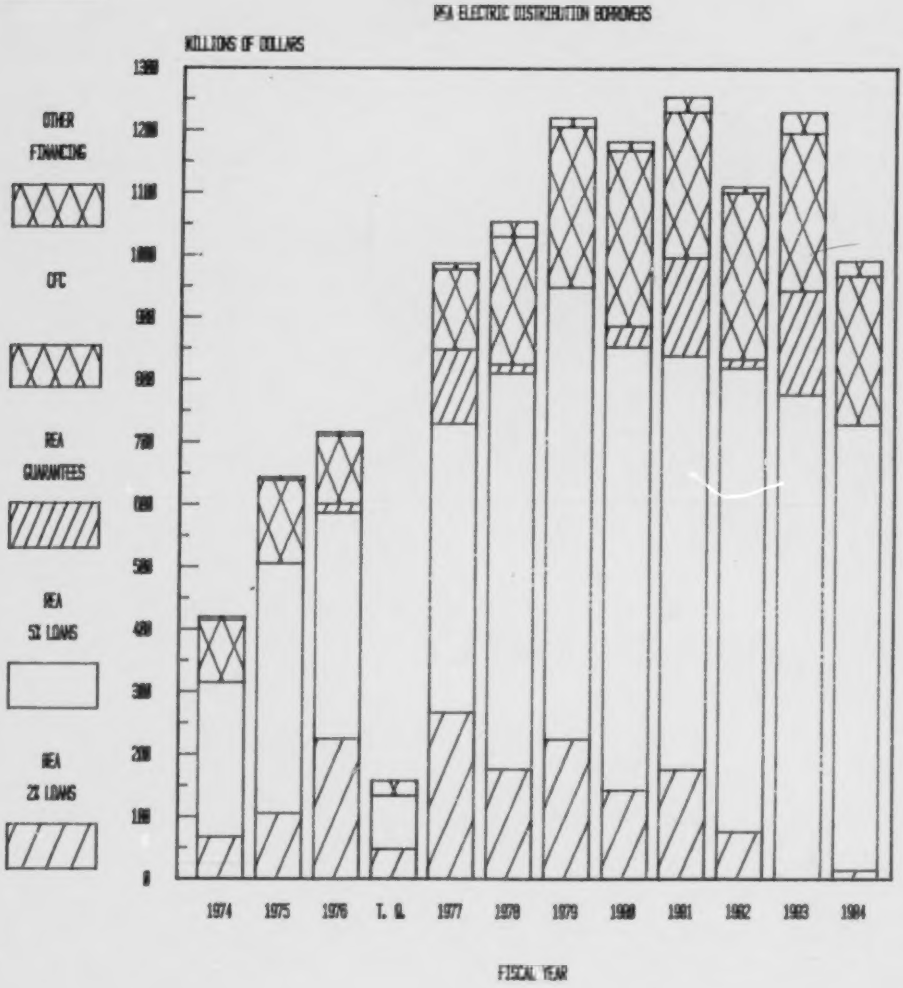


TABLE D-3

Long-Term Financing Approved by Fiscal Year REA Electric Distribution Borrowers (in millions)

	REA		Non-REA			
Fiscal Year	2%	5%	REA Guarantee Commitments	CFC	Other Financing	Total Long-Term Financing Approved During FY
1969	$162.0	---	---	---	---	$ 162.0
1970	269.7	---	---	---	---	269.7
1971	222.0	---	---	$ 1.8	---	223.8
1972	282.6	---	---	50.7	$ 0.6	333.9
1973	176.8	$206.0	---	88.3	8.9	480.0
1974	65.5	347.6	---	99.9	7.1	520.1
1975	105.0	398.5	---	134.7	6.6	644.8
1976	222.5	365.9	$ 13.4	108.1	6.1	716.0
TQ	47.2	88.3	---	20.4	1.6	157.5
1977	268.2	462.1	117.8	129.9	6.6	984.6
1978	176.2	633.8	15.7	204.5	22.1	1,052.3
1979	222.9	727.5	---	254.6	13.3	1,218.3
1980	142.4	709.8	32.5	280.8	14.9	1,180.4
1981	178.3	660.5	156.3	234.5	23.3	1,252.9
1982	77.8	740.1	16.4	265.6	11.9	1,111.8
1983	2.7	774.7	164.3	252.6	37.4	1,231.7
1984	12.6	716.9	1.1	237.8	22.4	990.8

REA electric power supply borrowers receive most of the financing approved by REA; almost all of this is provided by non-REA sources, mainly the Federal Financing Bank, with an REA loan guarantee. Since the 1973 amendment to the Rural Electrification Act, which gave REA the authority to guarantee loans made by other lenders, REA's program of financing for power supply projects has grown from a modest one to one of very large magnitude.

Chart D-4

SOURCES OF LONG-TERM FINANCING

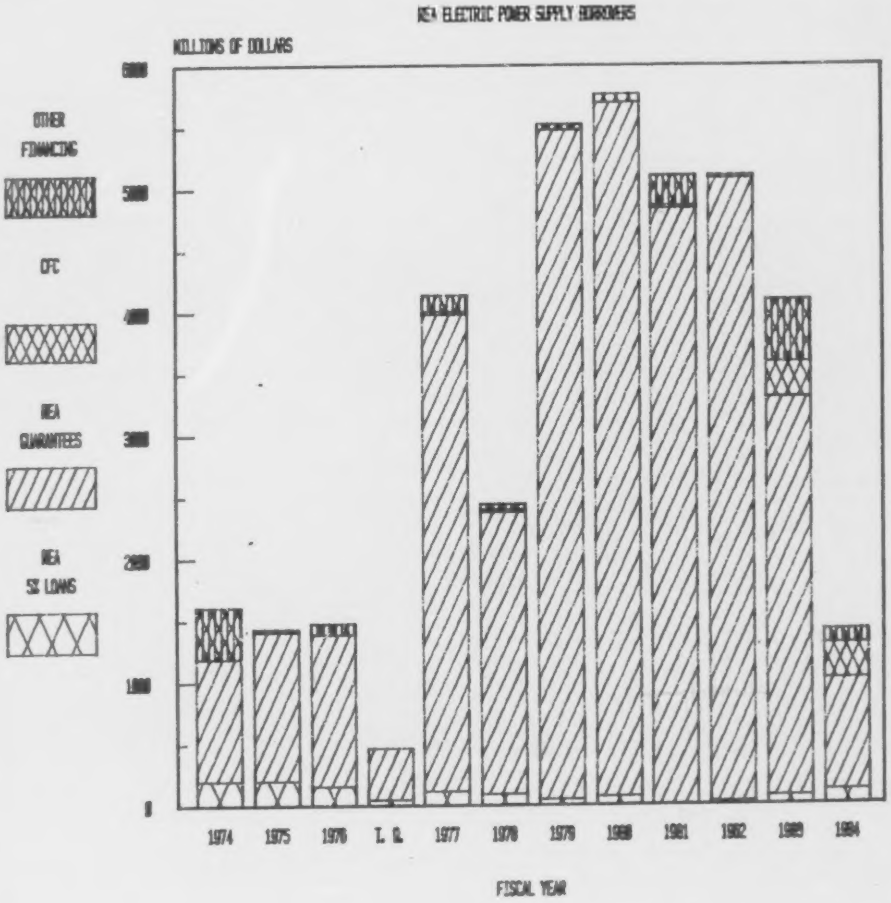


TABLE D-4

Long-Term Financing Approved by Fiscal Year REA Electric Power Supply Borrowers (in millions)

	REA		Non-REA			
Fiscal Year	2%	5%	REA Guarantee Commitments	CFC	Other Financing	Total Long-Term Financing Approved During FY
1969	$182.8	---	---	---	---	$ 182.8
1970	75.2	---	---	---	---	75.2
1971	139.8	---	---	$ 11.0	---	150.8
1972	155.6	---	---	42.1	$ 75.0	272.7
1973	58.3	$176.8	---	10.1	---	245.2
1974	---	205.5	$ 974.4	4.9	422.0	1,606.8
1975	---	196.5	1,206.3	23.7	---	1,426.5
1976	---	161.6	1,228.1	8.1	76.1	1,473.9
TQ	---	52.0	403.9	-0-	9.9	465.8
1977	---	119.7	3,867.7	20.4	121.4	4,129.2
1978	---	90.0	2,293.4	5.5	44.2	2,433.1
1979	---	49.6	5,429.7	8.4	35.6	5,523.3
1980	---	72.7	5,627.6	61.4	11.2	5,772.9
1981	---	11.2	4,838.7	13.2	232.9	5,096.0
1982*	---	32.1	5,048.2	22.7	4.5	5,107.5
1983*	---	72.6	3,224.0	298.8	507.7	4,103.1
1984*	---	120.4	896.1	272.5	123.8	1,412.9

*Does not include funds made available through the provisions of the Economic Recovery Tax Acts ($629.2 million in F.Y. 1982, $526.4 million in F.Y. 1983 and $46.1 million in F.Y. 1984).

The number of REA electric borrowers has not changed much since about 1950. The small increases that have occurred during the last several years have been mainly because of the formation of new power supply systems that are wholly owned by REA electric distribution borrowers.

The number of REA telephone borrowers increased rapidly during the first 10-15 years of the program. The number of telephone borrowers continues to increase each year mainly because of initial loans to existing telephone utilities to extend and upgrade telephone service to rural subscribers.

Chart D-5

NUMBER OF REA BORROWERS

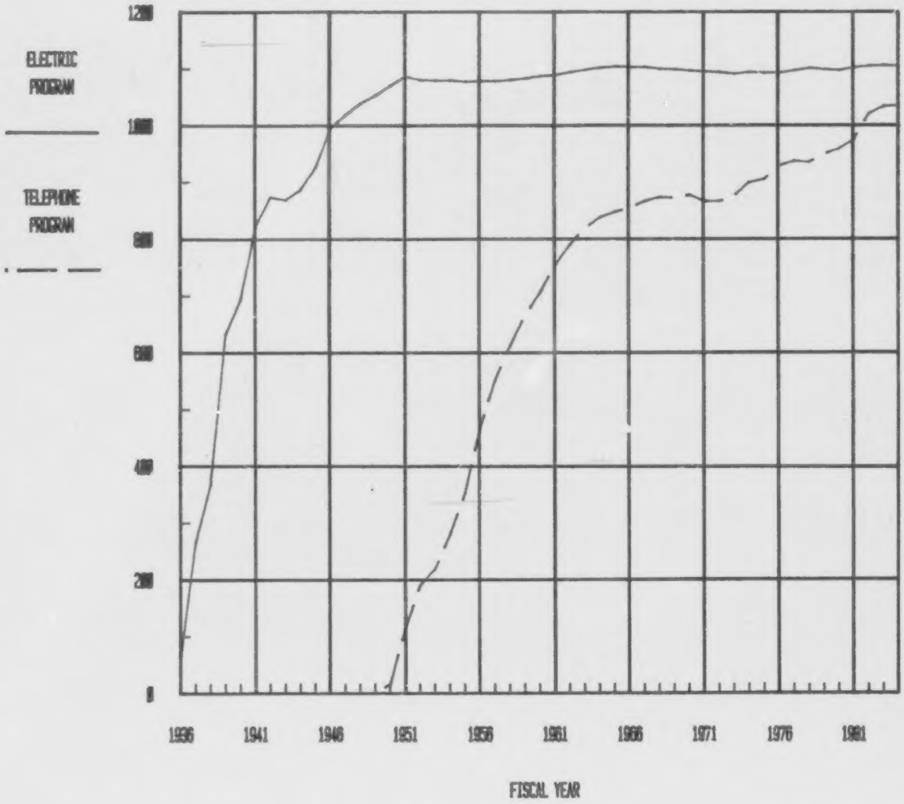


TABLE D-5

Number of REA Electric and Telephone Borrowers, Fiscal Years 1936-1984

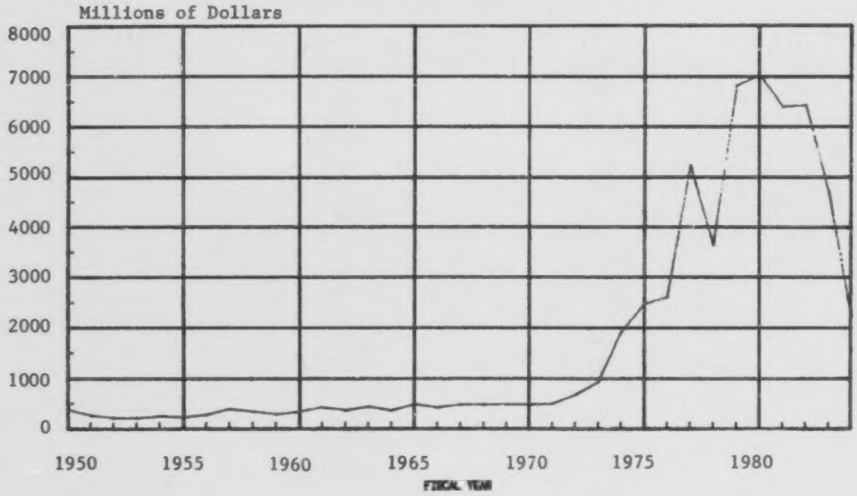
Fiscal Year	Electric Borrowers	Telephone Borrowers
1936	66	---
1937	266	---
1938	367	---
1939	632	---
1940	692	---
1941	823	---
1942	874	---
1943	869	---
1944	887	---
1945	926	---
1946	996	---
1947	1,019	---
1948	1,039	---
1949	1,053	---
1950	1,070	17
1951	1,076	113
1952	1,080	190
1953	1,079	219
1954	1,079	279
1955	1,077	351
1956	1,078	466
1957	1,078	551
1958	1,080	611
1959	1,083	665
1960	1,087	705
1961	1,089	753
1962	1,094	790
1963	1,098	820
1964	1,102	838
1965	1,104	848
1966	1,103	855
1967	1,103	867
1968	1,100	874
1969	1,099	873
1970	1,097	878
1971	1,095	867
1972	1,094	867
1973	1,091	876
1974	1,094	900
1975	1,093	915
1976	1,093	930
TQ	1,093	930
1977	1,097	946
1978	1,101	957
1979	1,099	974
1980	1,097	985
1981	1,102	1,004
1982	1,105	1,021
1983	1,106	1,034
1984	1,105	1,036

Although the total amount of financing provided or guaranteed by REA has increased greatly, as has the complexity of many of the electric generation and telephone projects, REA's staff has effectively handled the increased work load.

Chart D-6

LOANS, GUARANTEES AND STAFF YEARS

Loans and Guarantees Approved*



*Includes REA and RTB loans and REA loan guarantee commitments.

REA STAFF-YEARS

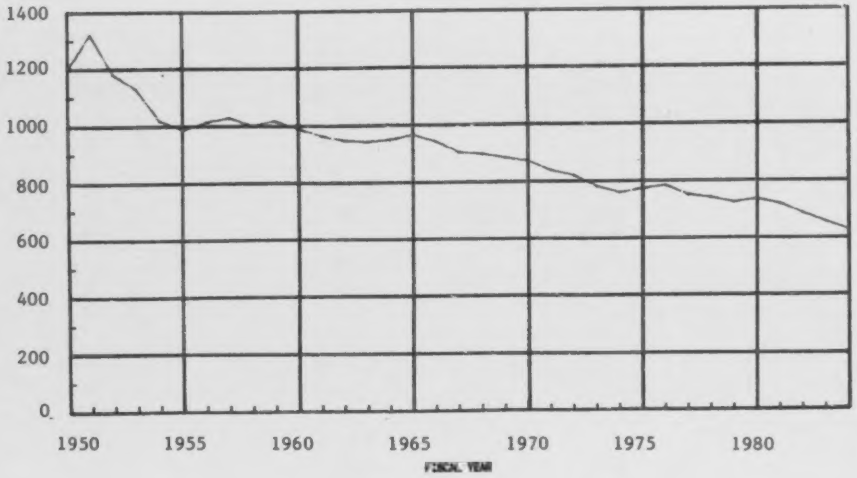


TABLE D-6

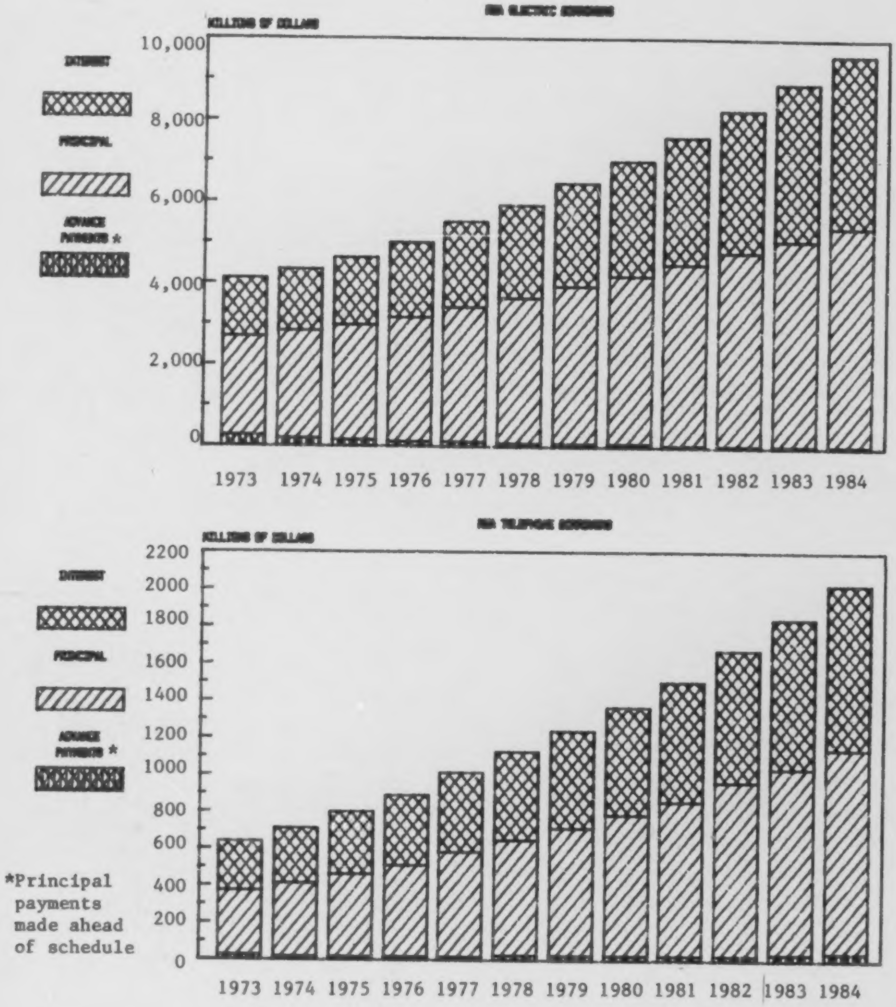
Staff Years vs. Loan Funds Approved, Fiscal Years 1936-1984

Fiscal Year	Staff Years	Loan Funds Approved*
1936	206	$ 17,929
1937	391	50,347
1938	460	31,660
1939	684	141,899
1940	785	44,880
1941	950	101,710
1942	1,094	91,282
1943	790	8,225
1944	646	34,002
1945	723	26,343
1946	987	290,914
1947	1,117	256,389
1948	929	319,110
1949	1,076	449,318
1950	1,201	379,719
1951	1,321	259,993
1952	1,183	209,017
1953	1,131	206,946
1954	1,020	241,816
1955	987	220,274
1956	1,014	270,785
1957	1,029	382,191
1958	1,002	330,875
1959	1,018	276,215
1960	989	325,108
1961	964	416,902
1962	948	352,931
1963	943	427,279
1964	950	351,412
1965	966	476,947
1966	943	412,729
1967	904	470,984
1968	898	469,928
1969	884	469,825
1970	872	469,962
1971	839	486,817
1972	821	662,873
1973	782	912,931
1974	760	1,896,075
1975	773	2,466,470
1976	785	2,603,287
TQ	168	692,585
1977	751	5,229,061
1978	741	3,634,935
1979	724	6,810,338
1980	735	7,022,604
1981	718	6,391,064
1982	686	6,425,693
1983	655	4,714,614
1984	626	2,223,891

*Includes REA and electric and telephone loans, RTB loans and REA loan guarantee commitments.

REA's record of principal and interest collections has been excellent. As of September 30, 1984, REA has collected more than $11.6 billion in principal and interest payments from its rural electric and telephone borrowers. Total losses to date have amounted to only $44,478.

Chart D-7 CUMULATIVE PAYMENTS OF PRINCIPAL AND INTEREST ON REA LOANS



*Principal payments made ahead of schedule

TABLE D-7

PAYMENTS OF PRINCIPAL AND INTEREST ON REA LOANS
CUMULATIVE TOTALS IN MILLIONS
(INCLUDES NOTES PAID IN FULL)

	ELECTRIC			TELEPHONE		
Fiscal Year	Advance Payments*	Principal Due & Paid	Interest Due & Paid	Advance Payments*	Principal Due & Paid	Interest Due & Paid
1971......	$317.1	$2,097.2	$1,205.0	$25.2	$262.3	$214.1
1972......	293.5	2,267.4	1,302.8	25.2	302.2	242.1
1973......	244.2	2,446.6	1,406.6	23.9	343.9	271.7
1974......	192.5	2,628.6	1,519.6	20.6	389.8	302.9
1975......	148.2	2,827.4	1,659.4	20.0	440.1	337.5
1976......	125.6	3,038.3	1,822.5	19.4	492.8	374.9
1977......	104.7	3,323.1	2,056.3	19.7	563.3	427.4
1978......	93.8	3,574.1	2,277.1	21.4	624.6	473.7
1979......	74.1	3,842.4	2,523.0	21.6	689.5	523.2
1980......	67.0	4,127.5	2,801.7	21.3	760.4	578.5
1981......	55.9	4,425.9	3,118.6	22.4	834.4	640,9
1982......	48.5	4,736.0	3,469.9	27.0	935.5	710.6
1983......	47.6	5,007.5	3,845.0	30.3	1,004.1	805.6
1984......	50.7	5,376.8	4,240.4	37.1	1,097.8	892.2

* Principal payments made ahead of schedule.

Each year since the Rural Electrification and Telephone Revolving Fund (RETRF) was established in 1973, REA has paid out more in advances to borrowers and in interest, than it has received in payments on loans.

The RETRF obtains the additional funds necessary to meet advances and interest expenses from the U.S. Treasury, directly or through the Federal Financing Bank, at rates of interest greatly in excess of the interest rates charged borrowers.

Chart D-8 RURAL ELECTRIFICATION AND TELEPHONE REVOLVING FUND

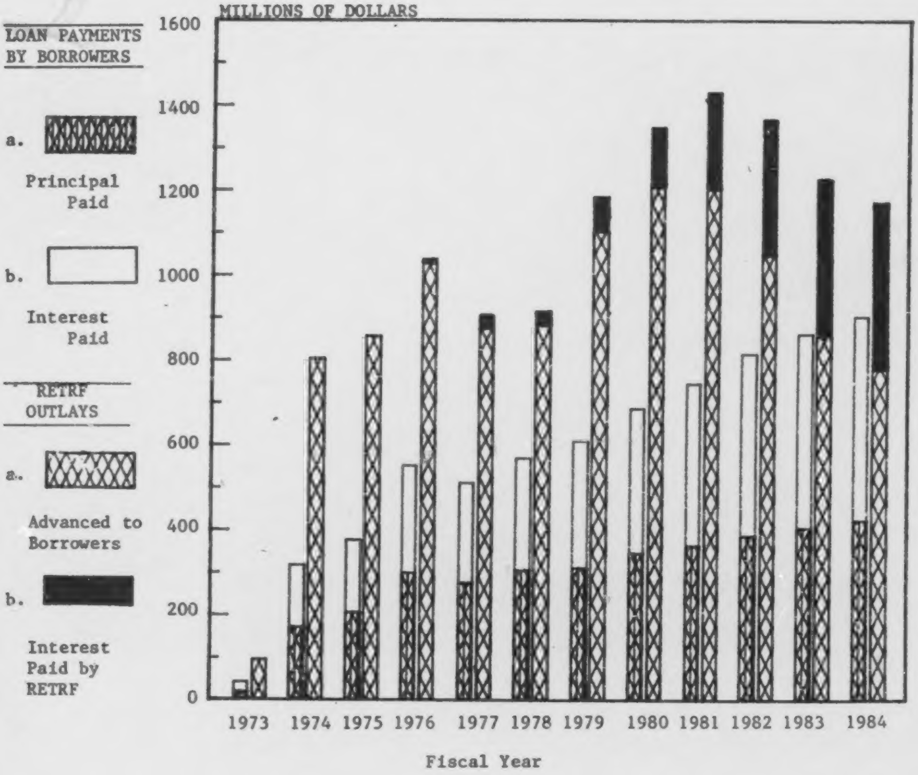


TABLE D-8 THE RURAL ELECTRIFICATION AND TELEPHONE REVOLVING FUND (RETRF)
(Dollars in Millions)

FISCAL YEAR	LOAN PAYMENTS RECEIVED		RETRF OUTLAYS	
	PRINCIPAL	INTEREST	ADVANCES TO BORROWERS	INTEREST PAID
1973	$ 20.3	$ 21.4	$ 92.4	$ 0.0
1974	173.1	144.2	802.4	0.0
1975	204.0	174.3	854.9	0.0
1976	299.2	252.3	1027.9	11.4
1977	275.2	234.9	874.9	29.6
1978	303.1	268.1	881.4	33.3
1979	313.8	296.9	1105.2	79.1
1980	349.1	336.9	1206.8	144.1
1981	363.1	382.7	1203.8	228.4
1982	389.3	425.8	1048.0	316.5
1983	405.2	459.1	855.6	367.9
1984	425.5	479.2	781.1	395.6

When Congress created the REA loan program it did not provide an interest rate subsidy. Interest rates charged borrowers fluctuated with the cost of money to the Government. It was not until 1944 that Congress established a fixed interest rate of two percent, which at that time was the approximate cost of money to the Government. As time went by and interest rates rose, the subsidy associated with REA loans grew. During recent years there has been a significant widening of the gap between the cost of money to the Government and the interest rate charged borrowers on REA loans.

Chart D-9 INTEREST RATE ON REA LOANS vs. COST OF MONEY TO THE GOVERNMENT

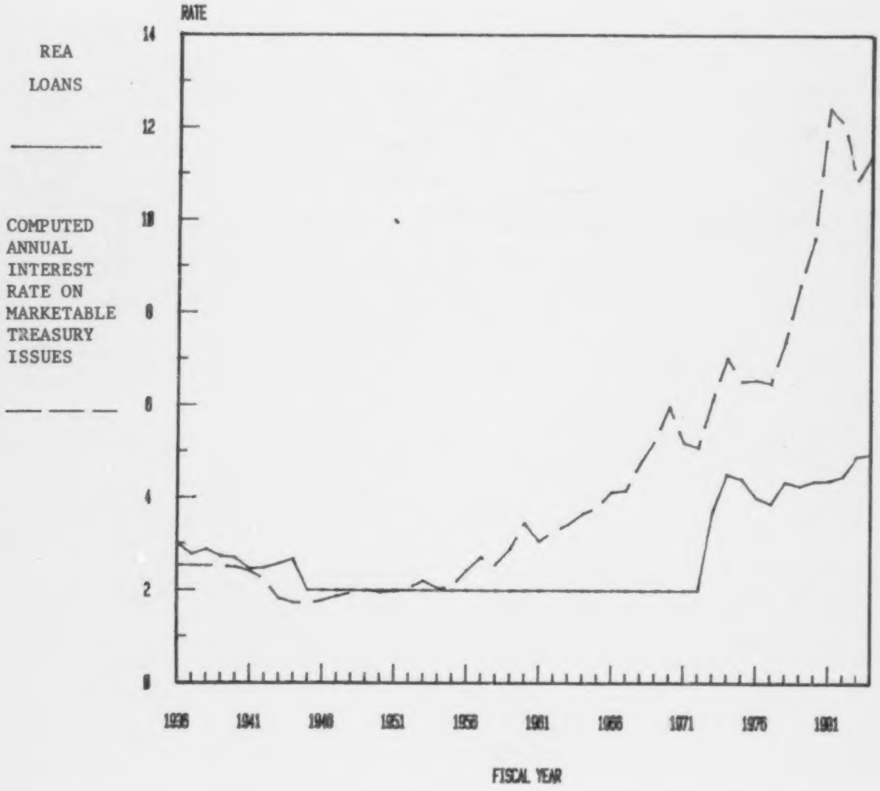


TABLE D-9

Interest Rate on REA Loans vs. Cost of Money to the Government

Fiscal Year	Interest Rate Paid by Borrowers on REA Loans*	Computed Annual Interest Rate On Marketable Treasury Issues**
1936	3.00	2.530
1937	2.77	2.525
1938	2.88	2.521
1939	2.73	2.525
1940	2.69	2.492
1941	2.46	2.413
1942	2.48	2.225
1943	2.57	1.822
1944	2.67	1.725
1945	2.00	1.718
1946	2.00	1.773
1947	2.00	1.871
1948	2.00	1.942
1949	2.00	2.001
1950	2.00	1.958
1951	2.00	1.981
1952	2.00	2.051
1953	2.00	2.207
1954	2.00	2.043
1955	2.00	2.079
1956	2.00	2.427
1957	2.00	2.707
1958	2.00	2.546
1959	2.00	2.891
1960	2.00	3.449
1961	2.00	3.063
1962	2.00	3.285
1963	2.00	3.425
1964	2.00	3.659
1965	2.00	3.800
1966	2.00	4.134
1967	2.00	4.165
1968	2.00	4.757
1969	2.00	5.232
1970	2.00	5.986
1971	2.00	5.210
1972	2.00	5.099
1973	3.72	6.129
1974	4.52	7.030
1975	4.42	6.533
1976	4.02	6.559
TQ	3.92	6.591
1977	3.88	6.481
1978	4.35	7.388
1979	4.27	8.592
1980	4.37	9.608
1981	4.38	12.435
1982	4.48	12.082
1983	4.90	10.850
1984	4.95	11.383

*Weighted average interest rate on REA loans approved during the fiscal year.
**Source: Monthly Statement of Public Debt, U.S. Department of Treasury

As of September 1984, REA borrowers had received more than $59.1 billion from REA loans, guarantee commitments and RTB loans. Loan guarantee commitments account for most of this financing, however, a large proportion has been provided by REA loans at the two percent and five percent interest rates.

Chart D-10

CUMULATIVE REA AND RTB LOANS AND REA LOAN GUARANTEE COMMITMENTS, AS OF SEPTEMBER 30, 1984

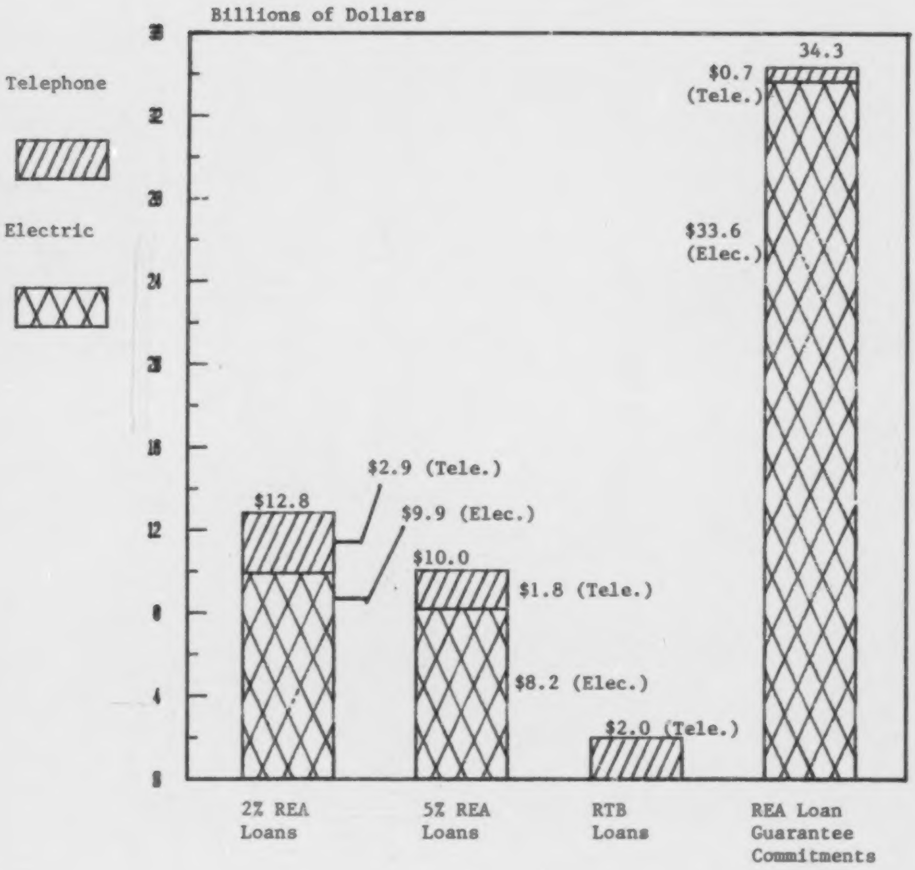


Table D-10

Cumulative REA Loans to Electric and Telephone Borrowers, as of September 30, 1984

	Electric Loans	Telephone Loans
UNITED STATES	$18,052,907,818	$4,738,327,507
Alabama	362,643,311	122,928,064
Alaska	649,823,196	108,440,000
Arizona	157,759,419	32,615,000
Arkansas	573,939,473	77,480,326
California	68,969,950	78,589,614
Colorado	825,679,746	46,139,499
Connecticut	---	---
Delaware	29,758,881	---
Florida	495,364,849	42,897,463
Georgia	685,444,712	211,955,285
Hawaii	---	---
Idaho	116,031,683	27,729,505
Illinois	417,953,447	69,475,106
Indiana	350,233,723	94,305,619
Iowa	599,684,225	128,021,063
Kansas	474,226,828	163,444,574
Kentucky	814,419,180	216,820,000
Louisiana	512,408,909	87,550,118
Maine	21,503,765	26,436,473
Maryland	122,408,500	2,061,000
Massachusetts	---	1,835,000
Michigan	278,688,812	85,448,571
Minnesota	786,853,443	208,819,530
Mississippi	456,573,504	76,838,000
Missouri	923,212,832	178,496,842
Montana	248,048,012	146,004,601
Nebraska	458,911,334	99,781,667
Nevada	63,620,563	7,603,000
New Hampshire	69,528,884	11,337,000
New Jersey	11,762,660	14,295,000
New Mexico	269,348,517	138,401,000
New York	24,022,891	41,503,399
North Carolina	488,645,211	177,159,323
North Dakota	825,708,332	131,598,114
Ohio	322,619,543	26,052,571
Oklahoma	756,179,234	180,790,642
Oregon	228,568,249	54,862,641
Pennsylvania	182,668,329	73,922,891
Rhode Island	---	---
South Carolina	493,770,545	172,350,994
South Dakota	399,056,525	133,861,015
Tennessee	295,040,033	224,540,000
Texas	1,671,602,226	394,691,180
Utah	63,152,996	33,808,000
Vermont	49,169,918	4,785,000
Virginia	334,007,756	59,199,000
Washington	179,913,598	37,628,490
West Virginia	6,281,633	59,174,000
Wisconsin	425,402,125	229,848,335
Wyoming	223,139,191	12,138,000
Puerto Rico	238,727,000	115,677,000
Virgin Islands	430,126	
Guam		57,776,000
Micronesia		11,212,000

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Table D-11 Cumulative REA Loan Guarantee Commitments and Rural Telephone Bank Loans
As of September 30, 1984

	REA Loan Guarantee Commitments		Rural Telephone Bank
	Electric	Telephone	
UNITED STATES	$33,645,164,820	$740,438,000	$1,993,109,001
Alabama	295,358,000	11,901,000	62,903,400
Alaska	230,895,000	46,943,000	59,391,150
Arizona	337,679,000	26,139,000	94,307,483
Arkansas	932,180,947	35,744,000	47,320,560
California	---	10,396,000	50,241,450
Colorado	1,608,087,000	---	23,013,469
Connecticut	---	---	---
Delaware	---	---	---
Florida	1,114,869,000	76,556,000	47,712,000
Georgia	3,765,763,278	88,241,000	109,386,900
Hawaii	---	---	---
Idaho	130,000	---	10,175,550
Illinois	1,829,766,000	---	20,396,697
Indiana	2,051,888,000	---	23,928,450
Iowa	266,758,000	9,700,000	33,678,973
Kansas	787,147,000	20,440,000	46,235,907
Kentucky	2,977,086,000	28,840,000	42,186,900
Louisiana	3,967,381,000	13,925,000	42,399,000
Maine	---	1,875,000	29,112,300
Maryland	---	---	2,326,800
Massachusetts	---	---	519,750
Michigan	818,369,756	2,953,000	47,136,600
Minnesota	1,296,686,000	10,239,000	76,402,953
Mississippi	723,650,000	5,200,000	14,853,300
Missouri	1,049,505,586	67,770,000	54,842,550
Montana	11,478,000	---	3,857,700
Nebraska	---	---	25,478,111
Nevada	---	---	8,319,150
New Hampshire	186,250,000	---	16,129,050
New Jersey	---	3,084,000	16,554,300
New Mexico	450,782,000	---	3,134,250
New York	---	22,070,000	35,429,625
North Carolina	1,520,460,000	31,158,000	91,366,072
North Dakota	2,831,938,253	---	14,638,733
Ohio	72,110,000	---	5,259,450
Oklahoma	643,176,000	2,744,000	96,298,880
Oregon	70,751,000	18,228,000	42,407,216
Pennsylvania	606,408,000	78,968,000	162,990,363
Rhode Island	---	---	---
South Carolina	533,121,000	7,885,000	105,838,950
South Dakota	13,828,000	---	14,995,701
Tennessee	---	14,358,000	57,579,900
Texas	1,080,866,000	76,131,000	151,062,152
Utah	981,136,000	---	6,638,100
Vermont	50,726,000	---	8,037,750
Virginia	263,000,000	---	14,993,318
Washington	---	---	13,867,350
West Virginia	---	5,250,000	16,426,200
Wisconsin	260,359,000	23,700,000	132,132,090
Wyoming	15,576,000	---	7,675,500
Puerto Rico	---	---	---
Guam	---	---	3,526,950

Table D-12 REA Loans to Electric and Telephone Borrowers, Fiscal Year 1984

	Electric Loans	Telephone Loans
UNITED STATES	$850,000,000	$228,559,000
Alabama	4,557,000	3,137,000
Alaska	60,202,000	37,854,000
Arizona	4,664,000	---
Arkansas	9,926,000	---
California	2,691,000	2,450,000
Colorado	25,533,000	90,000
Connecticut	---	---
Delaware	---	---
Florida	43,188,000	5,235,000
Georgia	98,435,000	---
Hawaii	---	---
Idaho	1,283,000	957,000
Illinois	4,220,000	4,112,000
Indiana	9,722,000	590,000
Iowa	14,005,000	4,591,000
Kansas	11,387,000	10,727,000
Kentucky	40,203,000	2,044,000
Louisiana	18,670,000	1,569,000
Maine	265,000	3,396,000
Maryland	6,502,000	---
Massachusetts	---	---
Michigan	4,852,000	---
Minnesota	26,204,000	6,157,000
Mississippi	9,589,000	---
Missouri	7,603,000	10,823,000
Montana	12,283,000	---
Nebraska	20,111,000	2,179,000
Nevada	3,926,000	---
New Hampshire	7,927,000	---
New Jersey	1,050,000	---
New Mexico	18,460,000	18,056,000
New York	2,139,000	1,700,000
North Carolina	29,943,000	7,414,000
North Dakota	21,851,000	---
Ohio	10,192,000	1,160,000
Oklahoma	81,442,000	5,589,000
Oregon	---	177,000
Pennsylvania	11,430,000	5,151,000
Rhode Island	---	---
South Carolina	29,175,000	18,268,000
South Dakota	15,762,000	16,684,000
Tennessee	4,080,000	11,607,000
Texas	87,515,000	7,675,000
Utah	3,384,000	2,087,000
Vermont	1,048,000	---
Virginia	12,806,000	---
Washington	1,089,000	---
West Virginia	403,000	6,300,000
Wisconsin	14,280,000	10,210,000
Wyoming	10,164,000	---
Puerto Rico	45,839,000	---
Guam	---	20,570,000

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TABLE D-13 REA Loan Guarantee Commitments and Rural Telephone Bank Loans
Fiscal Year 1984

	REA Loan Guarantee Commitments		Rural Telephone Bank Loans
	Electric	Telephone	
UNITED STATES	$897,205,000	$105,099,000	$143,027,850
Alabama	---	---	---
Alaska	---	---	5,160,750
Arizona	---	---	903,000
Arkansas	55,055,000	---	---
California	---	---	6,919,500
Colorado	65,140,000	---	3,399,900
Connecticut	---	---	---
Delaware	---	---	---
Florida	---	28,930,000	---
Georgia	51,946,000	26,138,000	---
Hawaii	---	---	---
Idaho	---	---	570,150
Illinois	285,981,000	---	---
Indiana	51,000,000	---	1,375,500
Iowa	66,233,000	---	6,105,750
Kansas	---	---	1,962,450
Kentucky	6,975,000	---	---
Louisiana	---	---	2,485,350
Maine	---	---	1,334,550
Maryland	---	---	---
Massachusetts	---	---	---
Michigan	177,500,000	---	557,550
Minnesota	---	---	10,695,300
Mississippi	---	---	5,386,500
Missouri	---	23,800,000	2,007,600
Montana	1,080,000	---	---
Nebraska	---	---	---
Nevada	---	---	---
New Hampshire	---	---	2,520,000
New Jersey	---	---	---
New Mexico	109,402,000	---	---
New York	---	---	---
North Carolina	---	---	24,838,800
North Dakota	---	---	---
Ohio	---	---	1,748,250
Oklahoma	26,893,000	---	12,402,600
Oregon	---	---	701,400
Pennsylvania	---	---	2,559,900
Rhode Island	---	---	---
South Carolina	---	---	25,715,550
South Dakota	---	---	---
Tennessee	---	---	1,758,750
Texas	---	26,231,000	12,728,100
Utah	---	---	2,305,800
Vermont	---	---	---
Virginia	---	---	---
Washington	---	---	---
West Virginia	---	---	---
Wisconsin	---	---	3,357,900
Wyoming	---	---	---
Puerto Rico	---	---	---
Guam	---	---	3,526,950

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TABLE D-14 LOANS, ADVANCES AND UNADVANCED FUNDS, FISCAL YEARS (FY) 1980 -1984
(Dollars in Millions)

	1984	1983	1982	1981	1980
REA Electric Loans					
(a) Approved during FY	850.0	$ 850.0	$ 850.0	$ 850.0	$ 925.0
(b) Funds advanced during FY	592.2	673.7	809.4	923.1	967.7
(c) Approved but unadvanced, September 30	1,754.0	1,504.1	1,334.4	1,293.8	1,367.1
REA Telephone Loans					
(a) Approved during FY	228.6	$ 250.8	$ 249.3	$ 249.8	$ 250.1
(b) Funds advanced during FY	187.8	181.9	238.6	280.7	239.1
(c) Approved but unadvanced, September 30	775.0	741.8	678.5	677.9	719.1
Rural Telephone Bank Loans					
(a) Approved during FY	143.0	$ 171.6	$ 184.8	$ 159.9	$ 160.0
(b) Funds advanced during FY	90.5	93.4	112.2	148.6	199.9
(c) Approved but unadvanced September 30	589.6	547.5	474.9	413.1	408.4
REA Loan Guarantee Commitments Electric					
(a) Approved during FY	897.2	$3,388.3	$5,064.6	$4,994.9	$5,660.1
(b) Funds advanced during FY	2,399.6	3,182.3	4,130.1	4,205.4	2,510.5
(c) Approved but unadvanced, September 30	11,090.6	12,878.1	13,831.7	12,946.8	12,114.0
REA Loan Guarantee Commitments Telephone					
(a) Approved during FY	105.1	$ 54.0	$ 77.0	$ 136.4	$ 27.4
(b) Funds advanced during FY	43.5	31.3	64.7	36.7	63.2
(c) Approved but unadvanced, September 30	191.6	216.7	281.1	270.7	171.1

BORROWER STATISTICS

Rural electric systems have historically had more rapid rates of increase in electric demand than the total electric utility industry. However, since 1973 growth in electric usage has declined for both REA borrowers and the total industry. 1983 statistics show that the amount of electricity used by rural electric consumers grew by one of the lowest rates in the history of the program. Reduced load growth translates into reduced demand for loan funds to build new generating plants. This means savings for rural electric consumers.

Chart E-1

ANNUAL PERCENT CHANGE IN ELECTRICITY USE

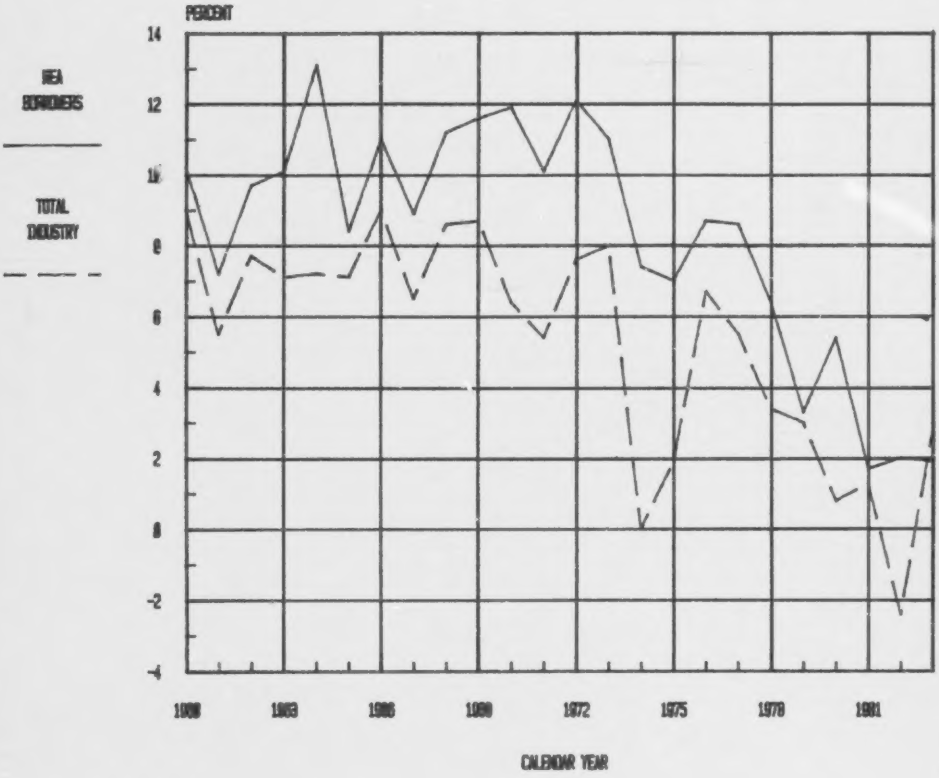


TABLE E-1 Growth Trends in Electricity Usage

Year	Annual Percent Change in kWh Sales to Ultimate Consumers	
	REA Borrowers	Total Electric Utility Industry
1960	10.2%	9.0%
1961	7.2	5.5
1962	9.7	7.7
1963	10.1	7.1
1964	13.1	7.2
1965	8.4	7.1
1966	11.0	9.0
1967	8.9	6.5
1968	11.2	8.6
1969	11.6	8.7
1970	11.9	6.4
1971	10.1	5.4
1972	12.1	7.6
1973	11.0	8.0
1974	7.4	0.0
1975	7.0	1.9
1976	8.7	6.7
1977	8.6	5.5
1978	6.4	3.4
1979	3.3	3.3
1980	5.4	2.0
1981	1.7	1.2
1982	2.0	-2.4*
1983	1.9	2.8**

Sources: REA Bulletin 1-1; Edison Electric Institute Statistical Yearbook.

* Revised
** Preliminary

Consumers served by rural electric systems have been charged increasingly higher prices for electricity since the early 1970's. These price increases came after a long period of steadily declining prices.

However, it is interesting to note that when inflation is adjusted for, there has been very little real increase in electricity prices to rural electric consumers-- electricity remains a very good buy. Rural electric consumers are paying far less for electricity today in constant dollars than they were in the early days of the rural electric program.

Chart E-2

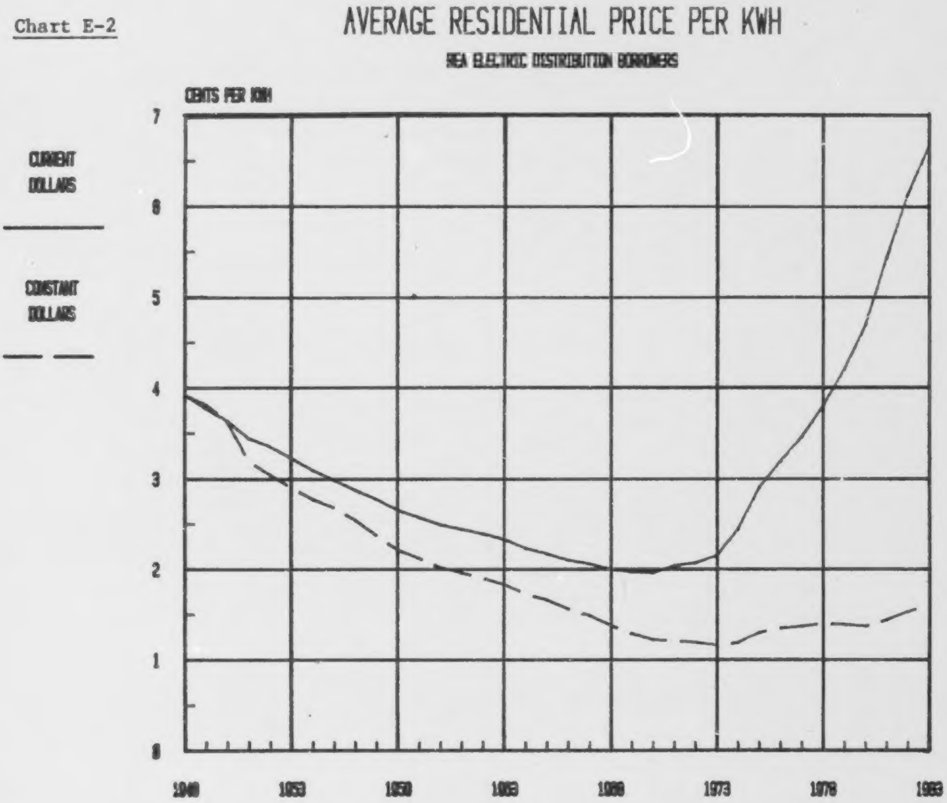


TABLE E-2

Average Residential Price Per kWh Charged by REA Electric Borrowers

Year	Current[1]	Constant[2]
1948	3.92¢	3.92¢
1949	3.77	3.81
1950	3.63	3.63
1951	3.44	3.19
1952	3.35	3.04
1953	3.22	2.90
1954	3.09	2.77
1955	2.98	2.68
1956	2.87	2.54
1957	2.77	2.37
1958	2.65	2.21
1959	2.57	2.12
1960	2.49	2.02
1961	2.44	1.96
1962	2.39	1.90
1963	2.33	1.83
1964	2.23	1.73
1965	2.17	1.66
1966	2.10	1.56
1967	2.06	1.49
1968	2.00	1.38
1969	1.97	1.29
1970	1.96	1.22
1971	2.04	1.21
1972	2.07	1.19
1973	2.15	1.16
1974	2.44	1.19
1975	2.90	1.30
1976	3.19	1.35
1977	3.46	1.37
1978	3.80	1.40
1979	4.20	1.39
1980	4.69	1.37
1981	5.43	1.44
1982	6.13	1.53
1983	6.66	1.61

[1] Current $ = dollars of the year.

[2] Constant $ = dollars adjusted for inflation.
The Consumer Price Index was used to convert current dollars to constant dollars.

Electric rates charged rural electric consumers have increased mainly because of sharp escalation in the cost of power. In most cases, increases in the cost of distributing power have been more moderate. The cost of power has risen mainly because of: (a) increasing fuel costs and (b) expensive new generating units that are coming on line.

Chart E-3

AVERAGE POWER & OTHER COSTS PER KWH SOLD

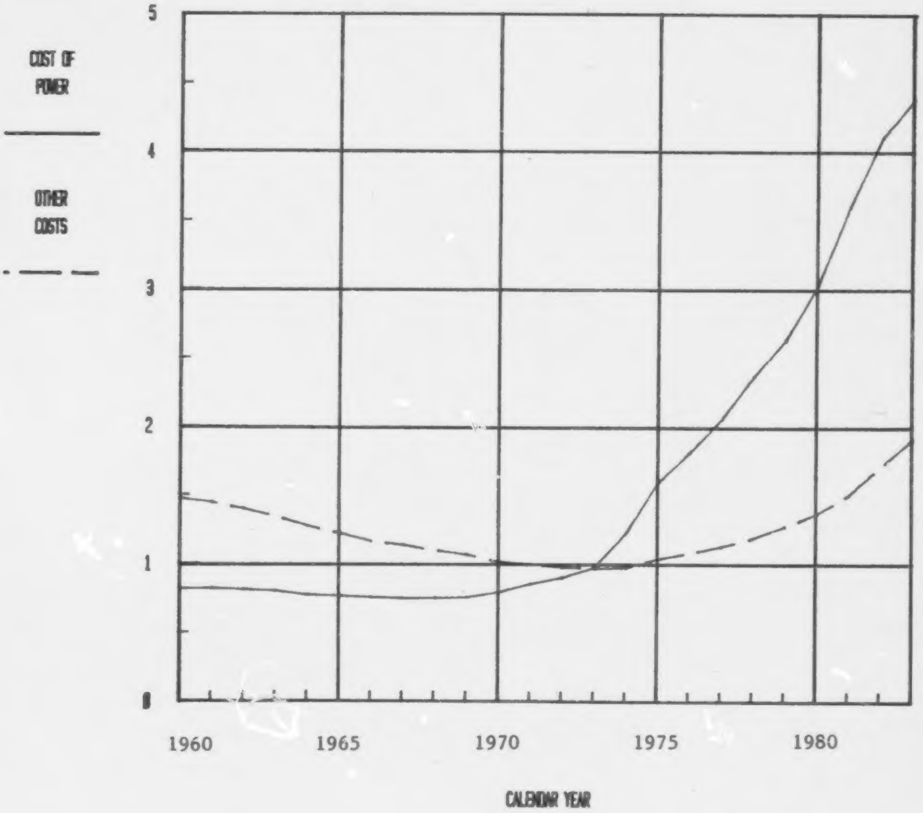


TABLE E-3 AVERAGE POWER AND OTHER COSTS PER kWh SOLD

Year	Cost of Power 1/	Other Costs 2/
1960	0.817¢	1.472¢
1961	0.819	1.446
1962	0.811	1.400
1963	0.802	1.346
1964	0.773	1.276
1965	0.766	1.224
1966	0.757	1.165
1967	0.750	1.138
1968	0.752	1.100
1969	0.757	1.069
1970	0.793	1.014
1971	0.854	0.999
1972	0.902	0.976
1973	0.974	0.969
1974	1.225	0.974
1975	1.593	1.039
1976	1.813	1.082
1977	2.056	1.129
1978	2.364	1.192
1979	2.631	1.277
1980	3.031	1.369
1981	3.606	1.504
1982	4.105	1.712
1983	4.383	1.912

1/ Includes power production expenses, transmission expense and cost of purchased power.

2/ Total revenue from sales of electric energy less cost of power.

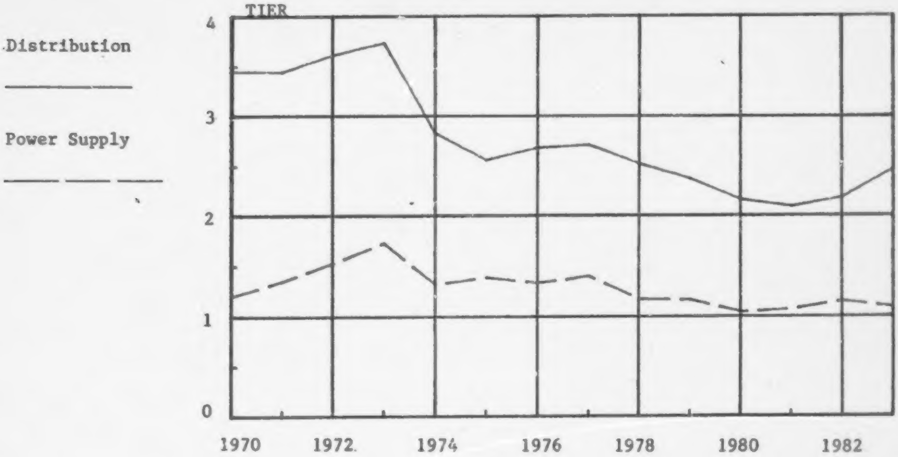
Source: REA Bulletin 1-1/

The financial ratios of REA electric borrowers have declined substantially since 1974 when costs began increasing rapidly and were not matched by similar rate increases.

Strong financial ratios are important because thay affect the cost at which REA borrowers are able to obtain funds from private sources.

Chart E-4

TIMES INTEREST EARNED RATIOS



EQUITY AS A PERCENT OF TOTAL ASSETS

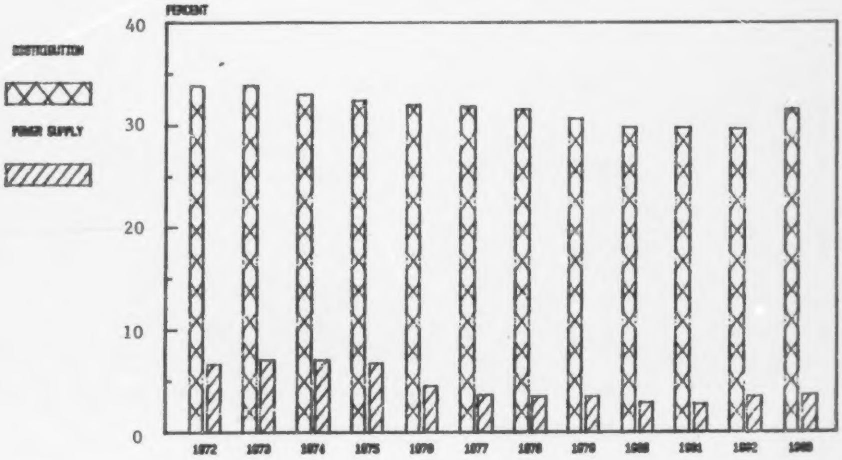


TABLE E-4 FINANCIAL RATIOS OF REA ELECTRIC BORROWERS

	Times Interest Earned Ratio (TIER)		Equity as a Percent of Total Assets	
Year	Distribution Borrowers	Power Supply Borrowers	Distribution Borrowers	Power Supply Borrowers
1970	3.45	1.20	34.3%	6.4%
1971	3.44	1.35	33.7	6.4
1972	3.61	1.53	33.9	6.6
1973	3.73	1.73	33.9	7.0
1974	2.83	1.32	33.0	7.0
1975	2.56	1.39	32.4	5.7
1976	2.68	1.33	32.0	4.5
1977	2.71	1.40	31.9	3.7
1978	2.52	1.17	31.5	3.5
1979	2.37	1.16	30.6	3.6
1980	2.16	1.04	29.8	3.0
1981	2.09	1.07	29.8	2.8
1982	2.18	1.15	29.6	3.5
1983	2.46	1.09	31.6	3.7

Most of the revenue collected by REA electric distribution borrowers is used to pay for wholesale power. This component of cost has increased rapidly, and margins as a percent of total revenue have declined.

Interest expense represents only a small percentage of the revenue of distribution borrowers.

Chart E-5

DISPOSITION OF THE REVENUE DOLLAR
REA ELECTRIC DISTRIBUTION BORROWERS

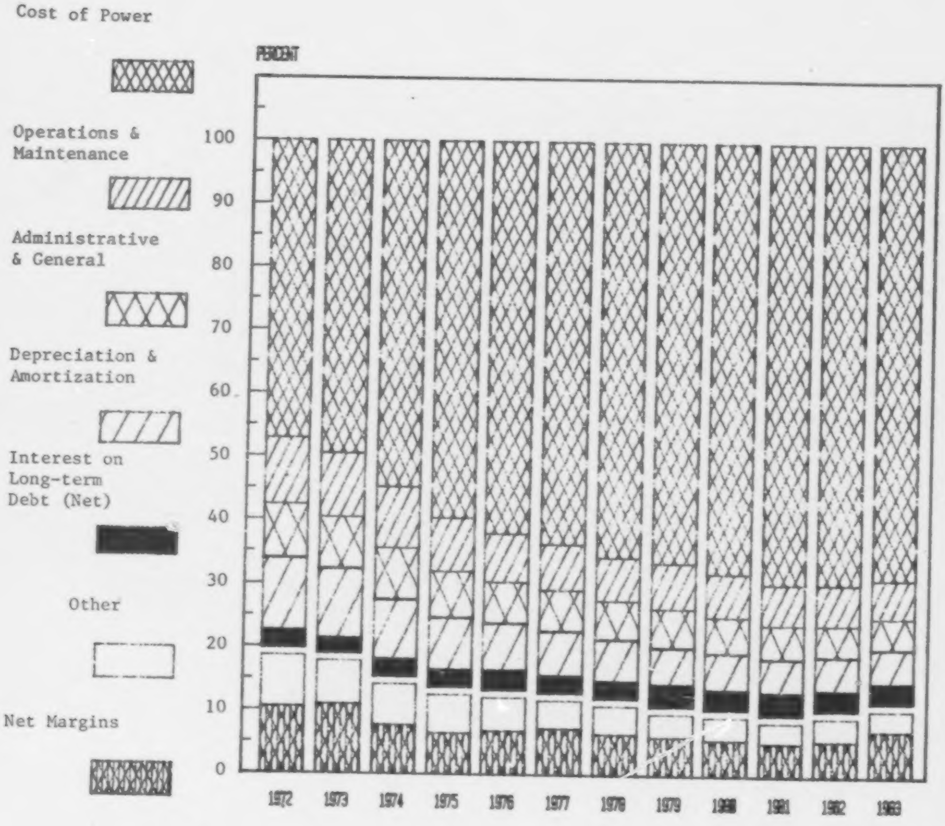


TABLE E-5

DISPOSITION OF THE REVENUE DOLLAR: REA ELECTRIC DISTRIBUTION BORROWERS
(Dollars in Thousands)

	1970		1971		1972		1973		1974	
	Dollars	Percent	Dollars	Percent	Dollars	Percent	Dollars	Percent	Dollars	Percent
Total Operating Revenue	$1,252,166	100.0	$1,412,277	100.0	$1,605,619	100.0	$1,840,930	100.0	$2,233,854	100.0
Cost of Power	541,172	43.2	641,150	45.4	759,760	47.3	909,404	49.4	1,227,751	55.0
Operation and Maintenance	139,040	11.1	151,760	10.7	164,692	10.2	185,023	10.1	212,590	9.5
Administrative and General	115,037	9.2	127,100	9.0	139,864	8.7	154,279	8.3	175,542	7.9
Depreciation & Amort.	158,751	12.7	170,473	12.1	181,762	11.3	195,801	10.6	211,899	9.5
Interest on Long-Term Debt (Net)	56,906	4.5	60,446	4.3	65,547	4.1	72,914	4.0	92,485	4.1
Other	101,399	8.1	113,755	8.1	122,847	7.7	124,339	6.8	144,311	6.5
Net Margins	139,861	11.2	148,093	10.5	171,147	10.7	199,170	10.8	169,276	7.5

	1975		1976		1977		1978		1979	
	Dollars	Percent	Dollars	Percent	Dollars	Percent	Dollars	Percent	Dollars	Percent
Total Operating Revenue	$2,867,288	100.0	$3,436,513	100.0	$4,105,986	100.0	$4,851,705	100.0	$5,514,270	100.0
Cost of Power	1,712,989	59.7	2,126,877	61.9	2,620,763	63.8	3,189,470	65.7	3,672,897	66.6
Operation and Maintenance	245,237	8.6	263,649	7.7	300,200	7.3	340,134	7.0	392,919	7.1
Administrative and General	199,490	7.0	232,464	6.7	257,984	6.3	291,054	6.0	325,121	5.9
Depreciation & Amortization	229,959	8.0	250,686	7.3	274,547	6.7	301,942	6.2	331,899	6.0
Interest on Long-Term Debt (Net)	119,100	4.1	143,550	4.2	171,016	4.2	203,156	4.2	245,532	4.5
Other	174,190	6.1	178,295	5.2	189,794	4.6	210,877	4.4	203,130	3.7
Net Margins	186,323	6.5	240,992	7.0	291,682	7.1	315,072	6.5	342,772	6.2

	1980		1981		1982		1983	
	Dollars	Percent	Dollars	Percent	Dollars	Percent	Dollars	Percent
Total Operating Revenue	$6,529,782	100.0	$7,705,652	100.0	$8,955,397	100.0	$9,854,024	100.0
Cost of Power	4,449,392	68.1	5,380,501	69.8	6,246,011	69.7	6,798,822	69.0
Operation and Maintenance	453,149	6.9	495,969	6.4	561,936	6.3	586,365	6.0
Administrative and General	362,969	5.6	407,395	5.3	456,511	5.1	495,842	5.0
Depreciation & Amortization	364,704	5.6	404,520	5.3	445,704	5.0	481,749	4.9
Interest on Long-Term Debt (Net)	295,524	4.5	356,530	4.6	418,765	4.7	467,150	4.7
Other	248,746	3.8	247,832	3.2	310,936	3.5	323,060	3.3
Net Margins	355,298	5.5	412,905	5.4	515,534	5.7	701,036	7.1

Most of the revenue collected by REA power supply borrowers is used for power production and to purchase wholesale power from other utilities. Increases in power production expenses are mainly due to increases in the cost of fuel.

Chart E-6

DISPOSITION OF THE REVENUE DOLLAR

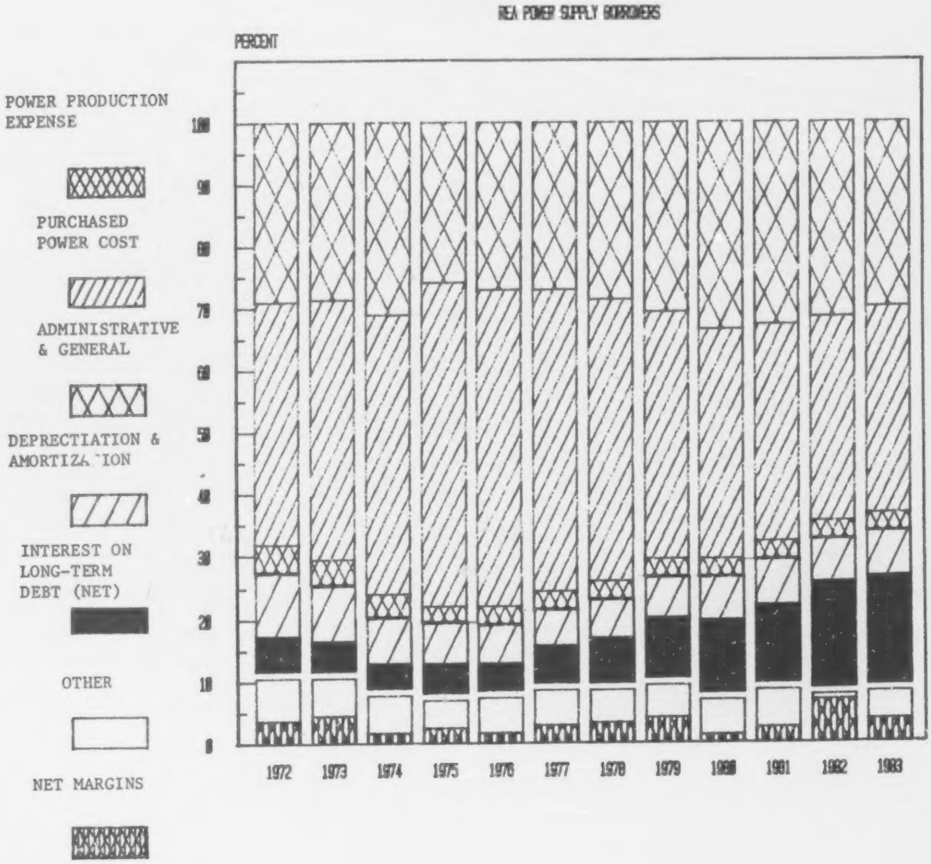


TABLE E-6

DISPOSITION OF THE REVENUE DOLLAR: REA ELECTRIC DISTRIBUTION BORROWERS
(Dollars in Thousands)

	1970		1971		1972		1973		1974	
	Dollars	Percent	Dollars	Percent	Dollars	Percent	Dollars	Percent	Dollars	Percent
Total Operating Revenue	$ 282,949	100.0	$ 353,718	100.0	$ 419,812	100.0	$ 496,813	100.0	$ 671,272	100.0
Power Production expense	75,626	26.7	95,373	27.0	122,602	29.2	141,215	28.4	208,643	31.1
Cost of Purchased Power	107,353	37.9	142,465	40.3	164,320	39.1	209,422	42.2	302,669	45.1
Administrative and General	14,390	5.1	16,161	4.6	17,890	4.3	19,947	4.0	23,778	3.5
Depreciation & Amortization	34,280	12.1	39,015	11.0	42,306	10.1	44,439	8.9	50,115	7.5
Interest on Long-Term Debt (Net)	21,202	7.5	23,900	6.7	27,777	6.6	29,817	6.0	35,551	5.3
Other	25,768	9.2	27,925	7.9	30,307	7.2	30,302	6.1	39,311	5.8
Net Margins	4,330	1.5	8,879	2.5	14,610	3.5	21,671	4.4	11,205	1.7

	1975		1976		1977		1978		1979	
	Dollars	Percent	Dollars	Percent	Dollars	Percent	Dollars	Percent	Dollars	Percent
Total Operating Revenue	$1,020,400	100.0	$1,289,355	100.0	$1,696,339	100.0	$2,187,001	100.0	$2,547,242	100.0
Power Production Expense	264,262	25.9	345,874	26.8	454,036	26.8	623,201	28.5	779,925	30.6
Cost of Purchased Power	532,211	52.1	662,279	51.4	833,160	49.1	1,000,883	45.8	1,013,511	39.8
Administrative and General	29,163	2.8	37,511	2.9	46,751	2.8	60,075	2.7	74,067	2.9
Depreciation & Amortization	61,783	6.1	77,559	6.0	96,944	5.7	129,430	5.9	168,949	6.6
Interest on Long-Term Debt (Net)	62,027	6.1	71,398	5.6	120,122	7.1	183,175	8.4	269,294	10.6
Other	46,594	4.6	71,120	5.5	96,697	5.7	116,059	5.3	141,012	5.5
Net Margins	24,360	2.4	23,614	1.8	48,629	2.8	74,178	3.4	100,484	4.0

	1980		1981		1982		1983	
	Dollars	Percent	Dollars	Percent	Dollars	Percent	Dollars	Percent
Total Operating Revenue	$3,177,001	100.0	$4,089,724	100.0	$5,026,911	100.0	5,882,166	100.0
Power Production Expense	1,062,096	33.4	1,327,829	32.5	1,577,119	31.4	1,763,088	30.0
Cost of Purchased Power	1,175,428	37.0	1,450,363	35.4	1,656,483	33.0	1,956,567	33.3
Administrative & General	96,210	3.0	114,931	2.8	141,768	2.8	157,404	2.7
Depreciation & Amortization	223,829	7.0	280,775	6.9	357,404	7.1	424,158	7.2
Interest on Long-term Debt (Net)	411,407	12.9	564,230	13.8	909,854	18.1	1,108,890	18.8
Other	166,352	5.4	245,505	6.0	46,485	0.9	259,040	4.4
Net Margins	41,679	1.3	106,091	2.6	337,798	6.7	213,019	3.6

ELECTRIC PROGRAM

Most of the power distributed by rural electric systems is purchased from investor-owned utilities (IOUs) and publicly-owned utilities. However, there has been a long-term trend toward REA borrowers generating more of their consumers' power needs.

Chart E-7

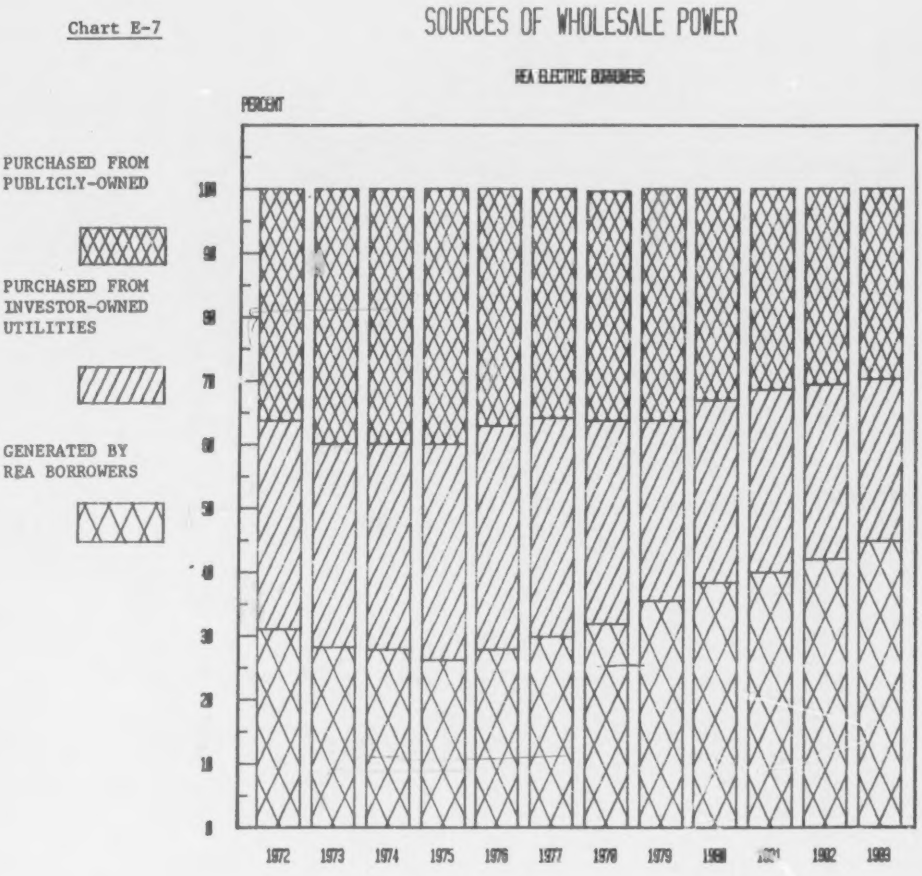


TABLE E-7 Sources of Wholesale Power for REA Electric Borrowers

Year	Generated By REA Borrowers		Purchased from Investor-Owned Utilities		Purchased from Other Public Sources	
	mWh	Percent	mWh	Percent	mWh	Percent
1970	20,637,751	26.3	25,375,456	32.3	32,524,169	41.4
1971	27,759,662	29.6	30,608,486	32.6	35,474,480	37.8
1972	32,290,340	31.0	34,153,465	32.7	37,832,238	36.3
1973	32,045,118	28.3	35,921,217	31.8	45,103,734	39.9
1974	32,795,053	27.7	38,515,457	32.5	47,057,050	39.8
1975	33,462,818	26.4	42,711,448	33.8	50,351,794	39.8
1976	38,660,059	28.0	48,100,273	34.8	51,498,254	37.2
1977	46,014,515	29.8	53,047,436	34.4	55,176,645	35.8
1978	52,472,215	31.9	52,220,422	31.8	59,725,947	36.3
1979	60,181,476	35.7	47,420,697	28.1	61,126,358	36.2
1980	69,536,829	38.2	52,614,304	28.9	59,864,121	32.9
1981	77,231,104	40.0	55,199,574	28.6	60,608,796	31.4
1982	81,568,123	42.0	53,083,098	27.4	59,372,827	30.6
1983	93,058,714	44.8	52,478,609	25.3	59,946,870	29.9

SOURCE: REA Bulletin 111-2

The main trends regarding the type of plant that rural telephone systems are building to serve their subscribers are: (a) buried cable is quickly replacing aerial plant and (b) central office equipment is increasing as a percentage of the total.

Chart E-8

TYPE OF PLANT IN SERVICE

REA TELEPHONE BORROWERS

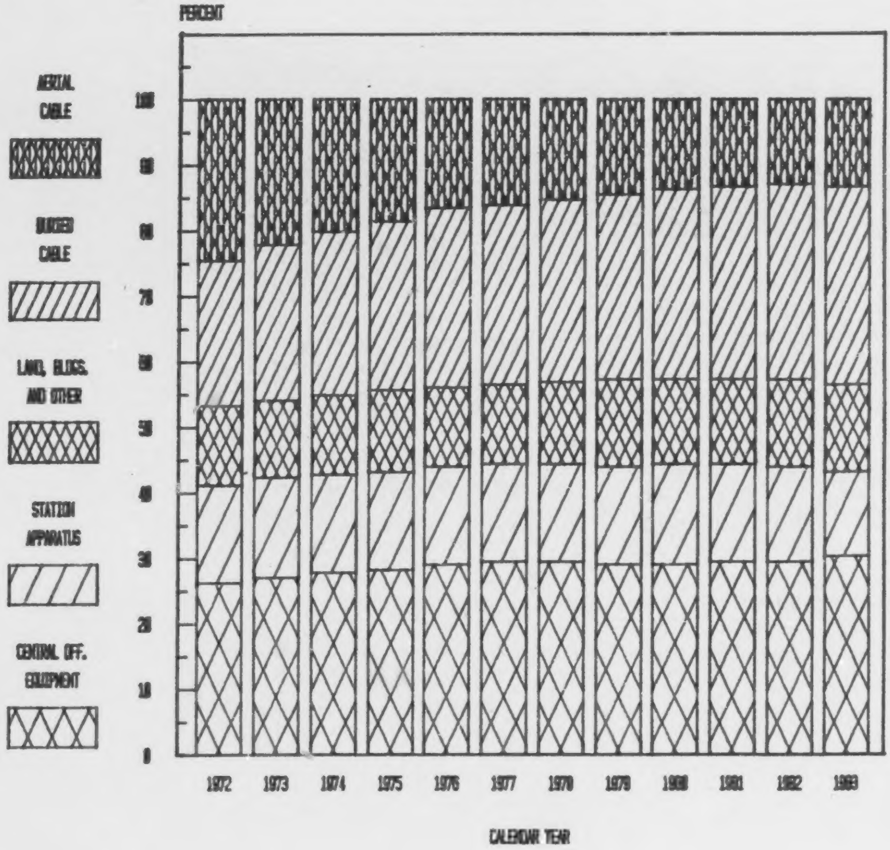


Table E-8

TYPE OF PLANT IN SERVICE
REA TELEPHONE BORROWERS
(Dollars in Thousands)

	1970		1971		1972		1973		1974	
	Dollars	Percent	Dollars	Percent	Dollars	Percent	Dollars	Percent	Dollars	Percent
Aerial Plant	$560,411	29.7	$565,955	27.0	$578,031	24.5	$603,435	22.3	$629,171	20.3
Buried Cable	346,736	18.4	435,379	20.7	530,030	22.4	639,646	23.7	766,162	24.7
Land, Buildings and Other	235,553	12.4	259,815	12.4	282,988	12.0	318,415	11.8	379,098	12.2
Station Apparatus	274,595	14.6	304,952	14.5	346,076	14.7	406,770	15.1	469,224	15.1
Central Office Equipment	469,395	24.9	532,629	25.4	623,071	26.4	731,129	27.1	858,464	27.7
Total	$1,886,690	100.0	$2,098,730	100.0	$2,360,196	100.0	$2,699,395	100.0	$3,102,119	100.0

	1975		1976		1977		1978		1979	
	Dollars	Percent	Dollars	Percent	Dollars	Percent	Dollars	Percent	Dollars	Percent
Aerial Plant	$646,194	18.5	$ 677,880	16.7	$ 770,373	16.3	$ 823,309	15.3	$ 881,086	14.5
Buried Cable	910,440	26.0	1,110,117	27.4	1,283,449	27.2	1,492,621	27.7	1,724,348	28.4
Land, Buildings and Other	426,827	12.2	489,938	12.1	580,679	12.3	678,351	12.6	788,006	13.0
Station Apparatus	520,577	14.9	598,480	14.8	703,181	14.9	810,473	15.1	918,001	15.1
Central Office Equipment	992,808	28.4	1,176,667	29.0	1,383,950	29.3	1,577,726	29.3	1,763,945	29.0
Total	$3,496,846	100.0	$4,053,082	100.0	$4,721,632	100.0	$5,382,480	100.0	$6,075,386	100.0

	1980		1981		1982		1983	
	Dollars	Percent	Dollars	Percent	Dollars	Percent	Dollars	Percent
Aerial Plant	$ 942,358	13.7	$ 993,164	13.1	$1,082,725	12.8	$1,229,119	13.1
Buried Cable	1,990,426	29.0	2,245,791	29.6	2,524,514	30.0	2,843,190	30.3
Land, Buildings and Other	900,231	13.1	996,291	13.1	1,122,753	13.3	1,255,115	13.4
Station Apparatus	1,035,624	15.1	1,118,827	14.8	1,222,583	14.5	1,226,768	13.1
Central Office Equipment	2,001,295	29.1	2,224,379	29.4	2,476,062	29.4	2,828,155	30.1
Total	$6,869,934	100.0	$7,578,452	100.0	$8,428,637	100.0	$9,382,347	100.0

An increasing percentage of the revenue collected by REA telephone borrowers has been obtained from toll revenues. Local service revenues have decreased in relative importance.

Chart E-9

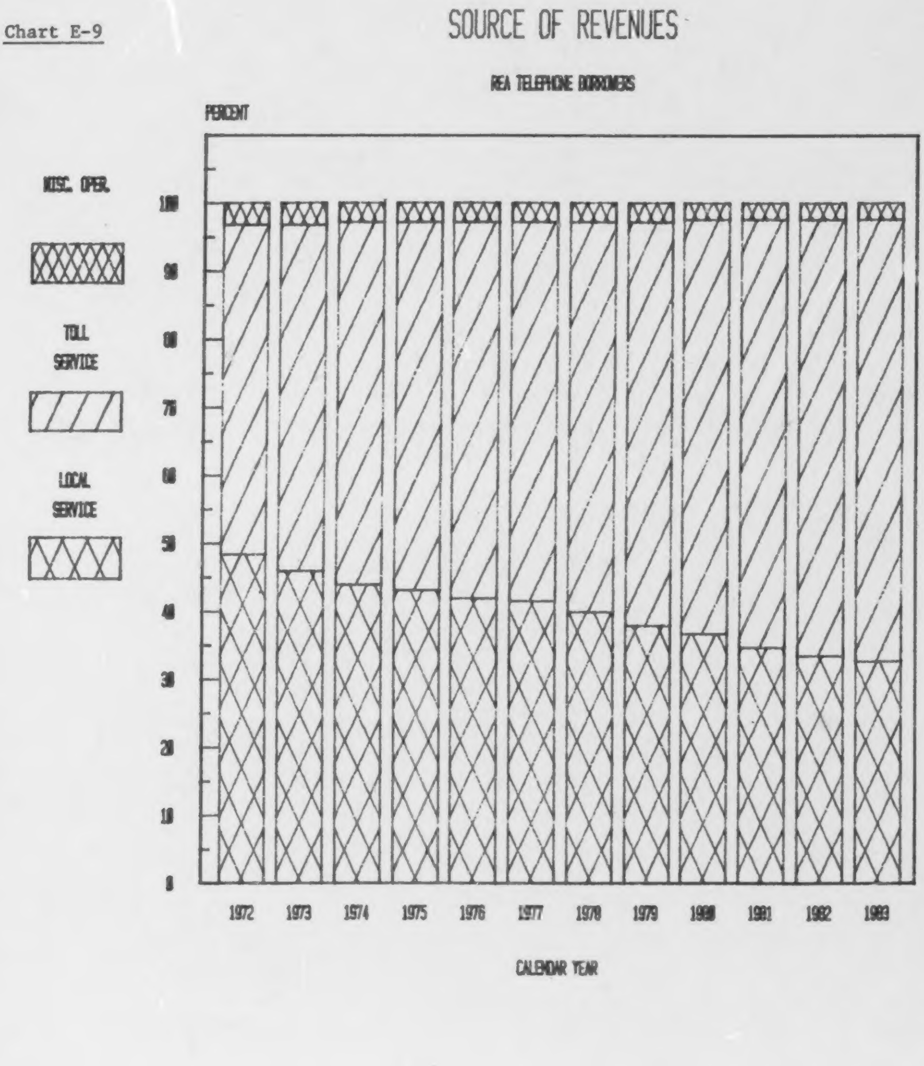


Table E-9

SOURCES OF REVENUES, REA TELEPHONE BORROWERS
(Dollars in Thousands)

	1971		1972		1973		1974		1975	
	Dollars	Percent	Dollars	Percent	Dollars	Percent	Dollars	Percent	Dollars	Percent
Local Service Revenue	$202,290	49.7	$224,915	48.4	$256,792	46.2	$291,127	44.1	$325,894	43.3
Net Toll Revenue	192,103	47.2	224,812	48.4	280,556	50.5	349,839	53.0	406,649	54.0
Misc. Operating Revenues	15,835	3.9	17,927	3.8	21,472	3.9	23,132	3.5	25,928	3.4
Uncollectible Operating Revenues	2,823	0.6	2,890	0.6	3,502	0.6	4,366	0.6	5,371	0.7
Total Operating Revenues	$407,405	100.0	$464,764	100.0	$555,318	100.0	$659,732	100.0	$753,100	100.0

	1976		1977		1978		1979		1980	
	Dollars	Percent	Dollars	Percent	Dollars	Percent	Dollars	Percent	Dollars	Percent
Local Service Revenue	$377,349	42.0	$ 449,804	41.4	$ 522,406	40.0	$ 586,323	38.1	$ 648,608	36.9
Net Toll Revenue	497,544	55.3	606,795	55.8	748,912	57.4	913,310	59.3	1,066,488	60.7
Misc. Operating Revenues	30,125	3.3	36,164	3.3	42,157	3.2	49,456	3.2	54,980	3.1
Uncollectible Operating Revenues	5,683	0.6	6,159	0.5	8,213	0.6	9,346	0.6	12,336	0.7
Total Operating Revenues	$899,335	100.0	$1,086,604	100.0	$1,305,262	100.0	$1,539,743	100.0	$1,757,740	100.0

	1981		1982		1983	
	Dollars	Percent	Dollars	Percent	Dollars	Percent
Local Service Revenues	$ 709,132	34.7	$ 798,273	33.4	$ 903,625	32.7
Net Toll Revenues	1,284,666	62.9	1,535,565	64.3	1,789,270	64.8
Misc. Operating Revenues	61,498	3.0	70,237	2.9	81,550	3.0
Uncollectible Operating Revenues	13,231	0.6	15,228	0.6	14,764	0.5
Total Operating Revenues	$2,042,065	100.0	$2,388,847	100.0	$2,759,681	100.0

The major expenses of rural telephone borrowers have been relatively stable as a percent of their total revenu: there have been no dramatic trends among any of the major expense items.

Interest on long-term debt, like other items has been stable--accounting for about ten percent of telephone borrower revenue for the past twenty years.

Chart E-10

DISPOSITION OF THE REVENUE DOLLAR

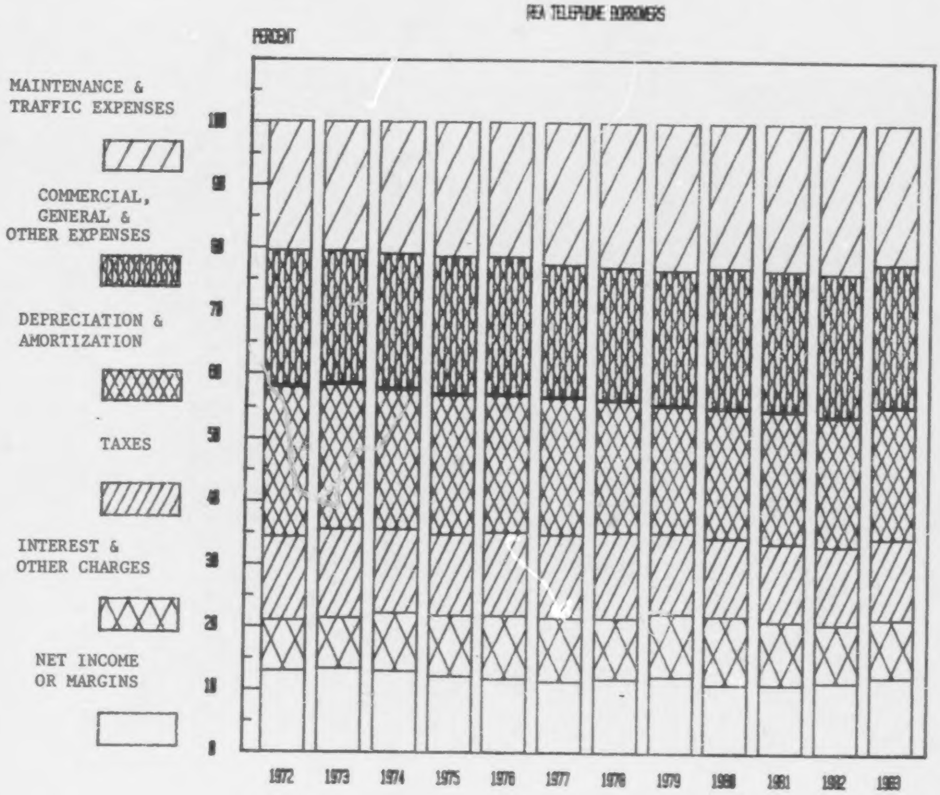


Table E-10

DISPOSITION OF THE REVENUE DOLLAR
REA TELEPHONE BORROWERS
(Dollars in Thousands)

	1971		1972		1973		1974		1975	
	Dollars	Percent	Dollars	Percent	Dollars	Percent	Dollars	Percent	Dollars	Percent
Total Operating Revenue	$407,405	100.0	$464,764	100.0	$555,318	100.0	$659,732	100.0	$753,100	100.0
Maintenance & Traffic Expense	84,447	20.7	96,362	20.7	114,815	20.7	139,139	21.1	162,191	21.5
Commercial, General & Other	84,579	20.8	98,434	21.2	116,201	20.9	139,047	21.1	162,765	21.6
Depreciation & Amortization	97,600	24.0	110,586	23.8	127,728	23.0	146,475	22.2	166,709	22.1
Taxes	55,464	13.6	61,892	13.3	76,440	13.8	87,866	13.3	97,440	13.0
Interest on Long-term Debt (Net)	30,064	7.4	33,751	7.3	41,246	7.4	53,830	8.2	66,202	8.8
Other Fixed Charges	2,135	0.5	3,504	0.8	5,346	0.9	7,364	1.1	7,575	1.0
Other Income & Deductions (Net)	(2,755)	(0.7)	(2,644)	(0.6)	(3,259)	(0.5)	(5,250)	(0.8)	(5,238)	(0.7)
Net Income or Margin	55,872	13.7	62,879	13.5	76,801	13.8	91,261	13.8	95,456	12.7

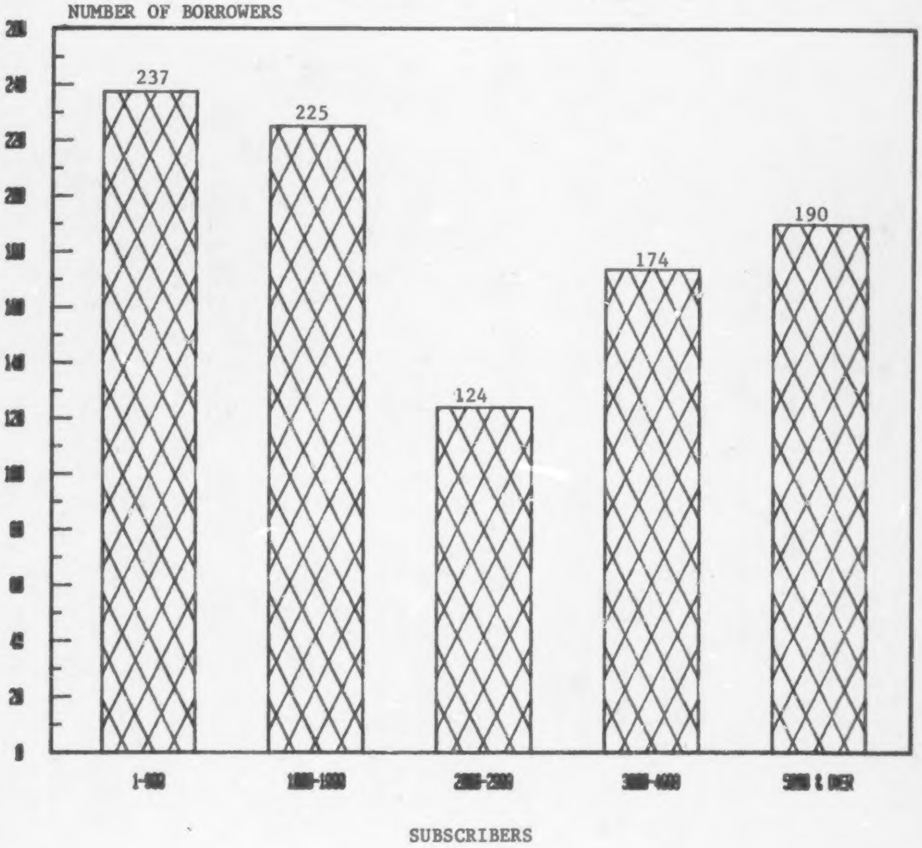
	1976		1977		1978		1979		1980	
	Dollars	Percent	Dollars	Percent	Dollars	Percent	Dollars	Percent	Dollars	Percent
Total Operating Revenue	$899,335	100.0	$1,086,604	100.0	$1,305,262	100.0	$1,539,743	100.0	$1,757,740	100.0
Maintenance & Traffic Expense	192,993	21.5	242,908	22.4	298,834	22.9	357,938	23.3	405,560	23.1
Commercial, General & Other	194,720	21.7	231,746	21.3	277,085	21.2	329,888	21.4	387,127	22.0
Depreciation & Amortization	195,087	21.7	232,252	21.4	270,383	20.7	312,337	20.3	361,059	20.5
Taxes	120,501	13.4	147,213	13.5	178,101	13.7	196,064	12.7	222,568	12.7
Interest on Long-term Debt (Net)	85,705	9.5	101,997	9.4	117,456	9.0	140,605	9.1	167,764	9.6
Other Fixed Charges	4,841	0.5	6,662	0.6	11,536	0.9	18,920	1.2	21,701	1.2
Other Income & Deductions (Net)	(6,909)	(0.8)	(7,659)	(0.7)	(8,940)	(0.7)	(15,598)	(1.0)	(24,395)	(1.4)
Net Income or Margin	112,397	12.5	131,485	12.1	160,807	12.3	199,589	13.0	216,356	12.3

	1981		1982		1983	
	Dollars	Percent	Dollars	Percent	Dollars	Percent
Total Operating Revenue	$2,042,065	100.0	$2,388,847	100.0	$2,759,681	100.0
Maintenance & Traffic Expense	477,895	23.4	567,870	23.8	611,352	22.1
Commercial, General & Other	450,339	22.1	540,339	22.6	620,492	22.5
Depreciation & Amortization	423,536	20.8	483,498	20.3	578,750	21.0
Taxes	258,441	12.7	299,197	12.5	362,589	13.1
Interest on Long-term Debt (Net)	192,568	9.4	215,923	9.0	238,025	8.6
Other Fixed Charges	16,657	0.8	13,667	0.6	13,080	0.5
Other Income & Deductions (Net)	(39,027)	(2.0)	(45,240)	(1.9)	(44,731)	(1.6)
Net Income or Margin	261,656	12.8	313,593	13.1	380,124	13.8

Most REA telephone borrowers are quite small businesses, in terms of the number of subscribers they serve. As of December 31, 1983, the average REA telephone borrower served 5,077 subscribers with an average of 5.6 subscribers per route of mile.

Chart E-11 SUBSCRIBERS SERVED PER REA TELEPHONE BORROWER

AS OF DECEMBER 31, 1983



Selected operating ratios of borrowers for 1983 and the four prior years are presented below. The ratios of total operating revenues and net operating income or margin to average plant in service show an increase from 26.7 to 30.4 and from 6.0 to 6.5 respectively, in a comparison of 1979 with 1983. The ratios of maintenance and depreciation expenses have also shown increases in this period. The operating ratio in the five-year period has decreased slightly from 88.1 in 1979 to 87.8 in 1983.

Table E-11 OPERATING RATIOS OF REA TELEPHONE BORROWERS

	1979	1980	1981	1982	1983
Dollars per subscriber:					
Investment (total telephone plant)	$1,610.16	$1,733.35	$1,836.36	$1,957.29	$2,044.13
Plant in service	1,493.92	1,611.77	1,732.24	1,854.25	1,945.31
Depreciated plant in service	1,121.02	1,205.89	1,276.81	1,338.14	1,363.11
Total assets	1,418.39	1,525.88	1,609.60	1,715.43	1,788.82
Percent of average plant in service:					
Total operating revenues	26.7	27.0	28.4	29.7	30.4
Operating expenses and taxes	15.4	15.6	16.5	17.5	17.6
Maintenance expenses	5.4	5.5	5.9	6.3	6.0
Depreciation expenses	5.3	5.4	5.7	5.9	6.2
Net Operating income or margin	6.0	5.9	6.0	6.2	6.5
Percent of total operating revenue:					
Total operating deductions and Fixed charges (operating ratio)	88.1	89.1	89.1	88.8	87.8
Other income and deductions (net)	1.0	1.4	1.9	1.9	1.6
Net income or margin	13.0	12.3	12.8	13.1	13.8

STATEMENT OF MR. HUNTER

Mr. HUNTER. Mr. Chairman and members of the committee, we do appreciate the opportunity of being here to present the annual budget and the program proposals for REA.

As you suggested, I will not go into every detail that is in the written statement, but will summarize it.

The Rural Electrification Administration is celebrating its 50th anniversary this year. It has been a truly remarkable program. Its loan and loan guarantee programs have provided around $60 billion to rural electric and telephone utilities.

During 1983, electric borrowers' revenues totaled $15.7 billion, $6 billion or 62 percent more than 4 years ago. More significantly, their net margins totaled $914 million, an increase of $517 million, or 130 percent more than the 1980 levels.

In 1980, there were 67 electric borrowers with deficit net margins. By 1983, that figure was down to 26. The downward trend in equity levels for electric borrowers has been reversed. Adjusted for inflation, the price per kilowatthour of electricity on REA financed systems is still less than it was 20 years ago.

Telephone borrowers' revenues totaled $2.8 billion in 1983, an increase of $1 billion or 57 percent over 1980. Their net incomes, or margins, were almost $400 million, an increase of 75 percent from 4 years ago. As in the electric program, telephone borrowers' financial ratios have shown improvement over the past 4 years.

I mention these things to point out to you that not only has the program succeeded in bringing quality electric and telephone service to rural America, but also that the borrowers themselves are, by and large, strong financially, with sound management, and are well accepted by other sectors of the utility industry and the private investment community.

The program achievements are a monument to those in Congress, both past and present, who conceived it and nurtured it, to the people who have worked in REA during the past 50 years, and most especially to the efforts of the people in rural America who have participated in this self-help program.

The fiscal year 1986 budget that we are proposing recognizes this strength and this acceptance. It reflects the fact that Government assistance is not needed to the degree that it has been needed previously. Many people in the program recognize this and believe this. They are willing to work with us to keep the rural electric and telephone systems strong, viable organizations, while at the same time, reducing dependence on the Federal treasury as the main source of financing, and thereby contributing to a reduction in the Federal deficit.

1986 BUDGET PROPOSALS

The 1986 budget proposals are as follows: We are again proposing a change of loan ratios and criteria in the electric program. These changes will allow better targeting of the insured funds to borrower needs. The number and the amount of new applications being received is dramatically less than previous years' experience.

Considering these two factors, the 1986 budget proposal of $500 million will be adequate. Also, due to the reduced total need and increased use of private capital, the budget proposes $300 million for the electric loan guarantee commitments.

For the telephone program, we are requesting $75 million for insured loans and $185 million for the rural telephone bank. No funds for telephone loan guarantee commitments are being requested for 1986. No appropriation is being proposed for the capitalization of the rural telephone bank stock. With borrowing authority from the Treasury of up to 20 times its paid-in capital and retained earnings, the bank has a virtually limitless supply of funds. We do not feel that these levels will result in a severely adverse impact on REA borrowers.

Senator COCHRAN. Mr. Hunter, may I interrupt you for just 1 second.

Mr. HUNTER. Yes.

Senator COCHRAN. Senator Andrews has another obligation in the Budget Committee. He has a question or two that he needs to ask and then go on back to the Budget Committee, where they are working on reconciliation of the resolution that was adopted last night.

With your permission, I am going to interrupt your statement for the purpose of recognizing him for the purpose of asking those questions at this time.

Mr. HUNTER. Certainly.

PROSPECTIVE NEW CRITERIA FOR REA LOANS

Senator ANDREWS. Mr. Hunter, as you know, we passed a budget resolution last night, and there is some question about the figures in it pertaining to rural electrification. The question is whether the figures passed will allow the program to continue as it has in the past with some of the cuts that the administration advocates that the rural electric cooperatives feel that they can go along.

We are about to go into reconciliation. In fact, that meeting started about 15 minutes ago. One of the key questions that we have to know a definitive answer for in order to get our figures correct, is whether or not you are going to apply any criteria and conditions which will be more restrictive this year and next year than the ones you applied last year?

Mr. HUNTER. You are speaking of this current year, rather than 1986?

Senator ANDREWS. I am talking about fiscal 1986. If you intend to apply any additionally severe criteria or greater restrictions on rural electric loans or rural electric programs, such consideration enters into my decision of whether or not I can support that reconciliation figure upstairs in about 15 minutes.

Mr. HUNTER. Senator Andrews, we are asking for a change in appropriation language which would allow a different set of ratios and criteria.

If an appropriation language change removes the present restrictions preventing us from changing the ratios and criteria, we will propose such a change. It would go through the normal administrative process. We feel that a system of ratios and criteria that would target the support from the revolving fund to those systems having the greatest need is a logical process which we should pursue.

[Additional information follows:]

CHANGE IN GENERAL FUNDS POLICY

Additionally, we have proposed a change in our general funds policy as a result of a 1983 audit report of REA loans policies and procedures by the Office of the Inspector General. The conclusion of that report was that the current REA general funds policy and procedure does not adequately measure borrower financial need and recommended a working capital method be used instead.

The current policy, in effect since 1969, considers only cash assets without consideration of current liabilities. A major resulting problem is that it does not give fair recognition to the significance of the timing of a borrower's wholesale power bill payment. For the typical electric distribution borrower, this now approximates 70 percent of total costs. As a consequence, some borrowers are able to draw loan funds in advance of construction needs while others may be unable to receive timely fund advances. Through analysis of borrower operating data reported to REA over a 3-year period, we have observed that a working capital level of 5 percent of total utility plant has been adequate for borrower operations.

By relating approval of loan applications and advances more closely to actual need, we believe we are fulfilling our responsibility to the public. This policy should also improve internal agency control over insured loan funds advance procedures. Likewise, by simplifying procedures, the change should also result in reduced administrative costs for REA and its borrowers.

There has been some criticism of the proposal that it would permanently eliminate around 70 percent of the electric distribution borrowers from participation in the REA insured loan program because their adjusted working capital levels currently exceed 5 percent of total utility plant.

This is not our intention. Neither would it be the result. There would be some temporary impact on borrowers as they adjust their operations to accommodate the new policy. We estimate that within 6 months to a year, the typical borrower will be in conformance and will be participating in the REA insured loan program as before.

This policy is fair and responsible and I believe, in the long run, best for the American taxpayer and the REA electric borrowers.

Senator ANDREWS. What you have just told me is that, based on the anticipated experience from the past, we can't hold with that figure we enacted last night because you are proposing to change the rules, to change the criteria, and to change the reserves that these co-ops have to work with.

Mr. HUNTER. The changes that we are advocating would be predicated on legislative approval.

Senator ANDREWS. That is true. I know it's part of the package.

Mr. HUNTER. That's right.

Senator ANDREWS. Some of us raised that question last night. We were all assured by the people up there that they had the clearance that all was fine. Then I began to remember that there were a number of proposed changes in the way the system operated. I requested whether that would enter into the equation and change the impact of a dollar figure that we approved last night.

So what you are telling me is that, yes, indeed and in fact, you are requesting these kinds of changes. So the dollar figure that we approved last night would not do what we thought it would do, based on past experience.

Mr. HUNTER. The changes would have some impact, Senator Andrews. However, in the same breath, we need to consider the fact that applications for loans have decreased markedly.

Senator ANDREWS. I understand that if these changes go through, you will wipe out all opportunity for loans in hundreds of rural electric co-ops. You can refine that figure a little bit, how many hundreds?

Mr. HUNTER. I do not feel that this impact would take place. We have no intention of that.

Senator ANDREWS. Others have said it would.

Mr. HUNTER. It is being reviewed at the present time as to what impact it would have. We do not look at the changes you are referring to as having as a goal the reduction in the use of the program, but rather merely to provide greater equity among the borrowers in the use of the program.

Senator ANDREWS. That is true. It will reduce the ability of those low density cooperatives to provide comparable cost electric power.

Mr. HUNTER. Actually, if we could make the ratio and criteria changes that we prefer, it could very well increase the amount of support that we give to borrowers with the greater need. It would increase——

Senator ANDREWS. Need based on density or need based on per farm averages?

Mr. HUNTER. Based on things such as density, the cost of wholesale power, geographical location and environment, and the economic considerations. We are hoping to translate these factors into categories of need, and then provide the financial assistance that is appropriate.

Senator ANDREWS. But, you are proposing, as we asked originally, significant changes in the way the program is applied in the field?

Mr. HUNTER. We feel this would bring about a more equitable approach in the program.

Senator ANDREWS. You say it is more equitable. Others say it is less equitable. But the point is you are asking for radical changes in the way the program operates in the field, substantial changes in the way the program operates in the field.

Mr. HUNTER. We are asking for changes which we feel would——

Senator ANDREWS. Yes; thank you, Mr. Chairman.

Senator COCHRAN. Thank you, Senator Andrews.

You may proceed now, Mr. Hunter, to complete your statement, if you wish.

CONTINUATION OF STATEMENT

Mr. HUNTER. The next part of the statement that I would like to address is related to the things we have just been describing. We do not feel the levels will result in a severely adverse impact on REA borrowers.

Substantial amounts of private capital are available to supplement REA loans. During fiscal year 1984, electric borrowers took advantage of those sources to a total of over $650 million. Reduced REA insured loan levels will help to stabilize the revolving fund while ensuring that funds are available for those electric and telephone systems that really need the help.

Consistent with the 1986 proposals, we are requesting rescission of the $30 million of class A stock of the Rural Telephone Bank, authorized during fiscal year 1985. Those funds are not needed because, as I mentioned earlier, the bank has virtually unlimited authority to borrow from Treasury.

We are also proposing rescission of the $216 million in direct appropriations made available in 1985 for reimbursement to the revolving fund. During 1983, the year on which the appropriation is based, the revolving fund actually had a net cash income of more than $90 million. Hence, there is no need for a reimbursement for that year's activity.

The 1986 budget request of $28,392,000 for administrative costs of the agency, we feel, is adequate to carry out the programs during 1986.

LONG-RANGE PROPOSALS

As is normally the case, the budget contains long-range proposals for Congress to consider.

This year, the long-range proposals include a recommendation to gradually phase out the REA and the Rural Telephone Bank lending activities by 1990. Provision is made, however, for the continuation of staffing levels necessary for the servicing of the $60 billion in loans and loan guarantees outstanding.

These proposals are consistent with the President's goal of reduction in financial dependence on the Government, and with the goal of financial integrity of the revolving fund.

The national economic recovery which we are experiencing entails some sacrifice from all sectors of the economy, including Federal Government programs. The rural electric and telephone systems should be no exception. In the end, all sectors of the American economy will benefit by the reduced presence of the Government in the marketplace.

REA borrowers, as a whole, will ultimately become stronger financially as they become more independent of the Federal Government. I feel that the President's 1986 budget proposal for the REA programs are worthy of your consideration. I urge you to support them.

This is the end of my prepared remarks, Mr. Chairman, and members. I will be happy to answer any questions either now or supply answers as needed in the future.

Senator COCHRAN. Thank you, Mr. Hunter.

INCREASE IN ELECTRIC RETAIL RATES

I am concerned about the proposal that you are making to cut back Federal support for the REA program and the impact that is going to have on costs. Recently, we have seen an escalation of costs on electric bills and telephone bills all over the country. Is this going to make matters worse, or improve them?

Mr. HUNTER. I think this is a proper concern on your part and the part of the committee. One item that relates to electric retail rates is the payment of interest by a distribution co-op. Currently, as a part of the overall cost of the operation of an average distribution co-op, only about 4.7 percent of total revenues goes to pay interest costs.

So only about 4.7 percent of the retail rates they charge are to cover distribution borrowers' long-term interest costs.

Senator COCHRAN. But when you take the Federal support away from the program, is that going to increase rates 4 percent?

Mr. HUNTER. It would result in an increase relative to that 4.7 percent of the total cost of operation. But again, it would be minimal.

IMPACT ON CONSUMERS

Senator COCHRAN. Has there been any kind of economic research for determining the economic impact on consumers of these proposals that you are making to the committee? If so, what are those findings as they relate to consumer costs?

Mr. HUNTER. Again, you have to use averages, and averages don't always tell the whole story. For the average residential co-op member at the end of the line, an increase of one percentage point in the interest rate on a revolving fund loan will increase the consumer's bill by about half a penny a day. This has been statistically explored across the Nation.

Mr. NAYLOR. Mr. Chairman, if I might.

Senator COCHRAN. Mr. Secretary.

Mr. NAYLOR. This issue is becoming increasingly far more complex than the question of lending funds. We tend to focus on that a great deal, I think, and properly so.

But I think we are seeing in many parts of the country that the more significant impact in rates to the consumer in the REA co-ops, as it is in all electric utilities, is the ability of management to control construction costs in the development of new power sources.

Cost overruns, including those in the 17 nuclear projects in which we are currently involved, and which have absolutely nothing to do with the REA revolving fund loan policies and conditions, are going to have a far more severe impact on rates than any proposal before us now.

I think we should evaluate whether we have unintentionally encouraged and participated in some new power supply projects that have resulted in unacceptably high retail rates and whether or not it is, in fact, because of the very nature of the programs which we offer. Have we opened new risks to our consumers and to the American public that are very significant?

We have seen this in the problems currently being faced by some Midwest utilities in the failure of a couple of the nuclear projects and even fossil-fuel projects. We are faced with these problems in the Midwest today because there is significant excess capacity available in some areas.

I think that reflects one of the reasons we have also seen a substantial downturn in the applications for REA funds. The management of the electric utility industry and the REA co-ops are reassessing their expenditures of funds and the enormous risks they are taking sometimes in planning and building new power supply facilities.

But still, in looking to the future, the ability of this industry—and it has an outstanding record—to be able to move toward increased private sector financing is good.

We encourage, and the borrowers recognize how important it is, the very careful management of their resources and expenditures in terms of the control of the growth in new equipment costs. The prevention of overruns in these costs is essential because these are really the big-ticket items in terms of rate increases to their consumers.

SUBSIDIZING RURAL UTILITIES

Senator COCHRAN. One thing that bothers me is that if you try to treat the rural electric systems just like an urban system, you are making a mistake, because it costs more to string wire and make that service available to the remote and less densely populated areas.

If you just pull the Federal support away from making that service available, the costs are going to skyrocket so high in the future that you wouldn't be able to afford rural electricity or rural telephone service.

This bothers me. I don't want us to approve a change that is going to undermine the ability of those out in the rural areas of the State to afford electricity or telephone service. I think it is just as simple as that.

You can call it what you want to. You can call it a "subsidy," and that's fine. I think it is. We admit it is. There is nothing immoral about subsidizing a program that makes that kind of service available. That is my attitude, and I think that attitude is shared by the other members of this committee.

ENGINEERING STANDARDS FUNCTION

Another concern of mine is the possibility that the REA is going to abandon the implementation of construction standards, and the like, in the Engineering and Standards Division. I understand there is a report about what this division does, and that there is going to be a change, or there could be a change.

Right now, if you have a breakdown of power—if you have an ice storm, for instance—cooperatives from adjacent States can come in and bring their equipment, and they can know the size of each piece of equipment they have to work on. It is easy to help the local cooperative that may be in need of emergency assistance.

If you get to the point where there are all different kinds of equipment that REA is going to permit in the system, and different kinds of components that will be permitted, co-ops will be less receptive to that kind of emergency service from other States or neighboring cooperatives.

Is that a problem? It has been expressed to me as a possibly serious problem if the REA does abandon its responsibility for setting standards and having some kind of standardized components in the systems.

Mr. HUNTER. Senator Cochran, we are looking at the function of engineering standards. This has been going through a transition for years. REA does not set standards to the degree now that it once did.

Certainly, when the REA program began, there was a need for very strong guidance on the part of REA to those farmers who had not been particularly involved in such an activity before.

This goes back, then, to the question of how well this fits into the overall review of the whole of Federal Government. Are there functions that could be moved out of the purview of the Federal Government and put in the private sector? We have not made a decision on this.

We are continuing to review how this function might be modified, or whether it ought to be modified. Should it be moved to the private sector? Is there a standard-setting capability in the private sector that fills that need? This reflects the change in the industry that is continuing to take place. We have not yet made a decision.

Senator COCHRAN. I would like to have a copy, if you could supply it to me, of the staff report on the Engineering and Standards Division. I don't want to put it in the record, but I would just like to have it for the subcommittee files. If you could submit that to me, I would appreciate it.

Mr. HUNTER. We will provide that to you as soon as it is available.

Senator COCHRAN. Senator Burdick.

PHASEOUT OF REA LENDING PROGRAMS

Senator BURDICK. Thank you, Mr. Chairman. Mr. Secretary, you have just testified that the administration plans to cut out all lending—REA lending programs—by 1990. We are dealing with the 1986 budget. Are you saying that there will be no lending programs after 4 years?

Mr. HUNTER. That is the projection. That is the proposal that is in this budget.

Senator BURDICK. We have heard today that crop insurance is going up. Prices are going down. Now borrowing is going up. What is this going to do to the agricultural industry?

Mr. HUNTER. We don't feel it will convert to a heavy burden. We come back to the question of what is more important to that farmer. Is the slightly reduced utility rate more important to the farmer than the interest rate he is going to have to pay for his purchase of a tractor or the purchase of a farm?

In other words, the question is: What is going to happen to the economy in general? The issue becomes far greater than the various types of Federal programs that exist. We feel it is important that even the REA do its part in support of the economic improvement that we need for the industry as a whole.

RETAIL RATE INCREASE ESTIMATE

Senator BURDICK. With all due respect, Mr. Hunter, I will have to challenge you on your cost estimate of half a penny a day. Let me tell you that the current interest rate for borrowing is 5 percent. Under your present plans, the borrowing will be the cost of money plus 1$^1/_8$ percent. You add that together, and we get a rate of between 10 and 11 percent.

You mean to say that raising this from 5 percent to 10 or 11 percent will only cost half a penny a day?

Mr. HUNTER. I must make plain that my statements said that for each percentage point of increase, it would amount to—would convert to half a penny a day for the average consumer.

Senator BURDICK. You have got it up to 6 cents now.

Mr. HUNTER. Three cents, half a penny a percentage point would be 3 cents.

Senator BURDICK. I just wonder what my co-op people are going to say about that one. That is your testimony.

ENGINEERING STANDARDS FUNCTION

I have another question that I have assured my manager out there in North Dakota that I would ask. You were asked partially by the chairman's question, but I am going to ask anyway.

It is my understanding that REA is proposing to eliminate the engineering standards division. I have heard from several cooperatives in North Dakota that are deeply concerned about the ramifications of such restructuring.

I would like to share with you the comments of one concerned manager, and I am quoting him:

> I believe that this division offers some of the most valuable and necessary service available to a cooperative from REA. These standards form the very heart of a system assigned to allow co-ops to change from the construction methods of the investor-owned utilities, that are too expensive to serve rural areas, to newer, better construction methods and standards that made possible reliable economic systems to serve our low-density service areas.
>
> We still need this division to keep us abreast of new, good developments and to keep us away from new methods that are costly mistakes. Most co-ops cannot afford an engineering department to do this. If they drop the standards division, many of us will be like a ship without a rudder.

Do you think that this manager has a basis for his concerns?

Mr. HUNTER. I feel that any service that has been provided to the people in any particular industry over the years, naturally results in some regrets about giving up that type of a service.

I would like to build a little bit on Mr. Naylor's remark of just a few moments ago. That is that our real concern about the health and vitality of the rural electric industry in this Nation relates to some other problems that are far bigger and have far greater impact upon a co-op and upon the industry than the question of whether or not we provide that service of engineering standards or whether it is provided from the private industry.

That concern is the basic problem of good management of the big generating plants that involve billions of dollars and which have an impact on the cost of that wholesale power to distribution co-ops. That cost of that wholesale power amounts to approximately 70 percent of their overall cost of operation. It is the major impact on retail rates.

That cost relates very specifically to the degree of good management and good decisionmaking, the real success of good management activities and function in the industry. We think that if REA is going to put a priority on something, it should be on the quality of management decisions rather than solely providing them engineering standards which is certainly appreciated by the co-ops, but the cost of new plants could and should be of more importance to them.

PHASEOUT OF REA PROGRAMS

Senator BURDICK. My final question is kind of a repetition. Do you really think that conditions as you see them today and as you project them, with the trouble on the farms, where the visitors we have had of late, where they claim they can't make it under present conditions, do you think that these REA co-ops can really withstand the pressures that are now existent to be left high and dry by the REA lending facility in 4 years?

Mr. HUNTER. Senator Burdick, I think you express a very appropriate concern. I think though, as I look at what is happening in the farming industry, that even as the Administrator of REA, I should address myself to the broader scope of problems that the farmer deals with.

I would come back to my statement awhile ago that I feel very sincerely that the question is how much interest cost that farmer is going to have to deal with.

This issue is the role of the Federal Government in the credit market and is more important to that farmer than the rather minimal impact of the increase in interest rates of the REA loan that the co-op receives. I would also reflect exactly the concern that you are expressing. I think we must, all of us, be extremely concerned about what is going to happen to the user at the end of the line, to the farmer who is the member of that co-op and address ourselves also to the various impacts that are brought about by what happens to the health and vitality of our whole economy.

Mr. NAYLOR. Senator, I wonder if I might just add a comment to that?

Senator COCHRAN. Yes.

Mr. NAYLOR. It has been my privilege over the last 30 days to meet with not only the State legislators and Governors, but also many farm organizations and individual farmers who have come to Washington to discuss with us the very serious credit problems that they are facing and which are directly affecting their operations.

The No. 1 priority, without exception, regardless of their philosophical belief in the direction of future legislation, has been their concern that we deal responsibly with the deficit problem being faced by the

Federal Government, in order to reduce their interest rates on their immediate farming operations and the impact of the relationship of the dollar to other currencies.

I think that is the most strongly felt concern and one that requires action by us across the board within the Government today. I think as we look at our responsibility within REA, we feel responsibility to increase our capacity to assist and counsel our borrowers in their financial operations, perhaps even more than the standards issue, because if you will examine where the most devastating impact on farmers is occurring in terms of electrical rates, it has absolutely nothing to do with the availability of borrowing or financial service in terms of funds.

It goes directly to the substantial cost overruns of various new generating facilities and the difficulty of controlling these costs. Many power producers are now facing substantial rate increases, not because of anything to do with the availability of loan funds, but because of the enormous cost overruns related to some of the new construction projects that have been undertaken and the inability to limit those overrun costs.

If you would go through the Midwest and the grain belt specifically, the exposure to massive rate increases in some of those areas with regard to electrical power, have nothing whatsoever to do with the availability or source of financing.

But it has a very direct bearing with relation to construction costs that have escalated to, in some cases, several thousand dollars per kilowatt in terms of cost overruns and other related expenses. What is required is the most stringent financial management and the finest quality of financial guidance, as well as on-scene management control by the managers themselves.

I think it is important that we recognize that distinction as we look at these programs. There are some increases in retail rates associated with the proposed changes, and these play an important part, but a rather small part, in giving relief to the individual producer and his costs.

If, in the process, we can do a better job in working with REA borrowers in managing their resources effectively, we have done a far greater service for the producer in his day-to-day ability to survive and prosper in the future.

Senator BURDICK. I don't think you will find any member of the committee to dispute you in what you say about doing something about these horrible deficits. I think we are all in agreement about that.

But it looks to me, for the next 4 years, that we are in kind of a crisis period. We shouldn't make things any tougher for the farmer than we have. That is my position. I think we can get through it, but some of these costs are going to be pretty high. It is going to, perhaps, aggravate the situation. That is what worries me. Thank you anyway.

Mr. NAYLOR. Thank you, Senator.

50TH ANNIVERSARY OF REA

Senator COCHRAN. Mr. Secretary, Mr. Hunter, let me say to you, I am glad we are having an opportunity to celebrate the 50th anniversary of the REA this year. Are there any special ceremonies or events planned?

Mr. HUNTER. We have some in-house events planned.

Senator COCHRAN. Are you going to have a birthday party? What are you going to do?

Mr. HUNTER. We don't have anything specific along that line. We do find an enthusiasm and a pride in the meetings with our own personnel within the agency. A lot has been done over these 50 years. I am always proud of the response out of our people. You ask them what they do and they say, "I work for REA." They don't say, "USDA." They don't say, "the Federal Government." They say, "REA." I think it is indicative of a morale and personal pride that makes you feel good, particularly in these times of stress when Government personnel have a concern about their careers in the larger picture.

Yet, we had a personnel meeting recently where that type of expression was pretty evident.

Senator COCHRAN. Well, I think we can all share in the pride, really, of the accomplishments of REA over the years. The programs have really had a tremendous impact on the face of rural America.

I know in my State, it is just amazing the improvement in the quality of life that has been made available through the programs of REA. I hope we can continue those programs and continue the sensitive response that has been characteristic of REA to ensure that those who do live in the rural areas of the country will enjoy at least a minimum standard of quality of life that the programs of REA have made possible.

SUBMITTED QUESTIONS

I have a few other questions which I will submit in writing to you, and I hope you will be able to respond to those at an early date.

Mr. HUNTER. Mr. Chairman, we will reply. That is our responsibility.

[The following questions were not asked at the hearing but were submitted for response for the record:]

QUESTIONS SUBMITTED BY SENATOR COCHRAN

Revenue Increases For Electric Borrowers

Question: In your opening remarks you outlined a dramatic increase in electric borrowers' revenues in 1983--62% more than in 1980. What made this happen?

Answer: Increased revenues from 1980 to 1983 were the result of load growth, moderating operating expenses, and approval of retail rate increases. Many borrowers are making significant efforts to improve their financial strength.

Question: Even more important than the 62% increase in revenues you mentioned was the 130% increase in profits. What changes brought about this great increase in such a short time?

Answer: Margins increased because of this financial planning and through more timely adoption and implementation of new rates. A slowing of capital expenditures for new construction contributed to the improved margins in such a short period of time.

Question: Do the significantly higher revenue and profit increases signal a need to reexamine rate structures?

Answer: We encourage continued review of electric rates necessary to provide sufficient revenues for operating expenses, reasonable working capital, and maintenance of financial strength important to the loan security of the Government and supplemental lenders.

Question: What happened in 1984 with regard to electric borrowers' revenues and profits? Was 1983 an unusual year, or were changes made in operations that continued the trend into 1984? Is it going to continue in 1985 and future years?

Answer: The electric borrowers are still submitting the year-end reports for 1984. A preliminary review of reports received indicates a continuation of improved margins. A slowdown in new construction continued throughout 1984. Expected conditions in future years vary widely based on local conditions. The major factor is wholesale power costs. Some borrowers are projecting substantial increases in wholesale power costs because of generating capacity still under construction; other borrowers are anticipating relative stable power costs because of present power resources and estimated load growth.

Increased Revenues For Telephone Borrowers

Question: What role did interest rates play in changing the profitability of electric and telephone borrowers? What impact will the higher interest rates from private sources have on profitability? Are borrowers' net margins now high enough that higher interest rates would have only minimal impact?

Answer: Interest rates did not play a significant role in the increase in the profitability of telephone borrowers. The single most significant factor has been the increase in toll revenues between 1980 and 1983. In this period, revenues increased by over $1 billion, more than 70% of which came from increased toll revenue. Higher interest rates would, in many instances, have only minimal impact on net margins.

Telephone Insured Loan Program Cuts

Question: The President's budget proposal calls for a drastic cut in the telephone insured loan program. At a time when small independent telephone companies are seriously concerned about future revenues as a result of deregulation of the telephone industry and the AT&T divestiture, why would you recommend eliminating their main source of affordable financing?

Answer: The main concern of the rural telephone industry has been what decision would the Federal Communications Commission make regarding the implementation of access charges and the method which would determine the amount of toll revenue that local exchange carriers would receive. The original FCC decision would have had serious adverse effects on rural telephone systems. The most recent decision of the FCC, which may not be entirely consistent with that recommended by the industry, is one which the industry believes it can live with. We believe more borrowers will be able to qualify for both loans from the Rural Telephone Bank and from non-Federal loan sources. The amount requested for the insured loan program will be available to those borrowers still in need for such low interest financing.

Loan Demand Levels

Question: You have indicated that the number and amount of new electric program loan applications is much less than in previous years. Could you please explain why this is happening?

Answer: The following table shows the number and aggregate amount of new applications for insured loans and guarantee commitments received in the first 5 months of this fiscal year and the 4 previous fiscal years.

	New Applications Received ($000)		
	Number	Insured Amount	Guarantee Commitment
10/1980 through 2/1981	157	$ 401,677	$ 2,387,812
10/1981 through 2/1982	136	$ 359,634	$ 404,385
10/1982 through 2/1983	127	$ 342,048	$ 821,811
10/1983 through 2/1984	72	$ 215,921	$ 442,007
10/1984 through 2/1985	78	$ 171,965	$ 10,987

The decision to apply for new financing is, of course, that of the borrower. We believe the major influences are:

Average year-to-year increase in total kWh sales to ultimate consumers by electric borrowers steadily decreased from greater than 11 percent prior to 1974 to approximately 2 percent for each of the last 4 years. Electric borrowers perhaps did not recognize this change in the pattern of electric consumption as early as possible because they adhere to emphasis on maintaining system integrity with regard to adequate capacity and reliability. We believe this built in inertia is now being moderated by the emphasis to operate at lowest possible cost, including minimizing investment in utility plant and system debt.

Electric borrowers have always used a portion of margins and other cash available to them for capital additions. For the borrowers using insured loan funds, the funds available to them from utility operations have been increasing while funds annually invested in new construction have been decreasing. Both of these factors decrease the need for new debt capital.

The rate of annual inflation has decreased resulting in a degree of stability in construction costs.

The decrease in annual increases in electric consumption has occurred throughout the total electric industry. Consequently, as a total, and generally in all geographic areas in the continental United States, the available generating capacity is greater than that needed to supply the electric demand, including reasonable reserves. Loan applications for new guarantee commitments are, therefore, basically for only cost overruns on previously loaned projects.

Question: What criteria have been used to determine that $500 million will be adequate for your loan program?

Answer: We have reviewed the number and amount of applications we have received over the past few years as well as the actual funds advanced on approved loans. They are both decreasing significantly. Likewise, with the borrowers increasingly improving financial conditions and the availability of non-REA financing, we would expect a larger share of borrowers' needs to come from private sources.

Engineering Construction Standards

Question: REA is considering eliminating its responsibilities in setting technical and engineering standards for construction of telephone and electric services. It has been estimated that construction costs would increase at least $130 million annually without enforceable standards for materials, competitive bids, and construction.

Who will set the standards if Engineering and Standards is abolished? Will the money saved be used to pay a contractor to do the work? Has REA priced such services? How will standards be enforced by a contractor? Is it likely that competitive bidding would lead to a deterioration of construction quality? Since the cost would increase so drastically, and since quality would deteriorate without REA standards, have you considered retaining the Engineering and Standards Division and charging user fees for the service?

Answer: For several months REA has been evaluating whether a need still exists for government involvement in rural electric and telephone system standards. REA traditionally has shouldered the responsibility for setting engineering standards for its borrowers. At the inception of the electric and telephone programs, engineering expertise within the system organizations was not available. As with so many government functions, however, the need for Federal involvement is less, but the service continues. We must decide whether to retain, modify or eliminate this service. We are weighing carefully the impact of any changes in our present standards-setting procedures.

Revenue Increases For Electric Borrowers

Question: How do electric retail rates of REA borrowers compare with rates charged by investor-owned utilities? Please be as specific as possible.

Answer: A general comparison of electric borrowers' retail rates is not easily made and depends on your base for comparison. The average residential revenue from rates in 1983 for all distribution borrowers was 6.7¢ per kWh; the residential revenue for investor-owned utilities averaged 7.2¢ per kWh. If a comparison is made at the average monthly usage --1000 kWh per month per consumer-- with adjacent utilities in the borrowers' service areas, about 72 percent of the borrower's rates were higher on January 1, 1984. This comparison is only valid on that date since it is based on rates then in effect.

Question: Were the changes that brought about increased revenues and increased profits in 1983 regional in nature or nationwide?

Answer: While there are many highly local circumstances among the over 900 distribution borrowers, the increase in revenue and improvement of margins was generally nationwide except for the North Central area of the U. S., which trended downward slightly during this period.

Question: Do you anticipate that the 26 electric borrowers who had deficit net margins in 1983 will be moved to a profit stage soon?

Answer: The number of distribution borrowers in 1983 with deficit margins matched the lowest in history, which occurred in 1972. REA continues to work closely with borrowers who show deficit margins to improve their financial strength. We expect these 26 borrowers to show improvement.

Increased Revenues For Telephone Borrowers

Question: Telephone borrowers had revenue increases about as dramatic as electric borrowers--57% above 1980 levels in 1983. Their profits increased 75%. What brought about these changes?

Answer: The continued growth in toll revenues has been the most significant factor in this change. Toll usage by the public has been increasing each year. Management of rural telephone systems have become increasingly cost conscious in the operations of their systems and are striving to keep operating costs at a reasonable level consistent with good service.

Rural Telephone Bank Capitalization

Question: In 1971, Congress established the Rural Telephone Bank to provide an assured and viable source of supplementary financing for the purpose of extending telephone service to rural America. That law required the U. S. Government to provide part of the capital for the Bank over time on an annual basis. The President's budget proposal for fiscal year 1986 would provide zero funds for capitalization of the Bank and would rescind the entire amount authorized by Congress for capitalization of the RTB in fiscal year 1985.

Why wasn't the $30 million used to purchase RTB stock in the first month of the fiscal year?

Answer: The Administration's budget proposal called for submission to the Congress of a request for rescission of these funds. We believe the capitalization of the Bank is adequate, and the Bank has the authority to borrow this amount of funds from the Treasury at the cost of money to the Treasury. The present capitalization of the Bank is sound from the standpoint of its investment portfolio and the capitalization increases each year through the requirement in the RE Act that each borrower from the Bank must invest 5% of the amount of its loan in Class B stock.

Loan Demand Levels

Question: What number and amounts are you expecting in fiscal year 1986? How does this compare with recent years?

Answer: We expect to receive around 100 applications in Fiscal Year 1986 totalling $900 million to $1.2 billion in the electric program. This compares to 150 applications totalling $1.5 billion for 1984 and 187 applications for $1.9 billion in 1983.

For the telephone program, we expect 73 applications totalling $218 million in 1986, compared to 106 applications totalling $320 million in 1985 and 105 applications totalling $326 million in 1984.

Pending Application/Loan Authorization Obligations

Question: For the record, could you please provide information on the number of unapproved electric and telephone applications that you have and how much they amount to?

Likewise, would you provide information regarding unobligated loan authorizations?

Answer: There are currently insured loan applications on hand totalling $158.5 million and $152.1 million loan guarantee commitments. In the telephone program, we have 166 applications on hand totalling $585.5 million. Of these, 65 applications totalling $237.2 million have completed engineering studies.

Private Capital

Question: How are ratios of REA/non-REA funds determined when deciding requirements for borrowers? How is the maximum REA level determined for each individual borrower?

Answer: The ratio of REA to non-REA loan funds is determined by a formula called Plant Revenue Ratio, which is total utility plant divided by operating revenues and patronage capital less cost of power. Loan portions from this ratio are: 9.1 and above, 90 percent REA and 10 percent supplemental; 8.01 to 9.0, 80 percent REA and 20 percent supplemental; 8.0 and below, 70 percent REA and 30 percent supplemental. An exception is made for those borrowers which had been by statute eligible for the special interest rate of 2 percent; these borrowers are eligible for 90 percent REA and 10 percent supplemental, if they qualified for the special rate on December 31, 1980. Presently, 139 systems are qualified.

Based on 1983 data, other borrowers qualified as follows:

Number of Borrowers	REA %	Supplemental %
8	90	10
13	80	20
760	70	30

Question: What are the new maximum REA/non-REA ratios that you are proposing?

Answer: No specific changes in criteria and ratios have been published. We do not believe the present formula provides an REA funding level for those systems most in need or based on their ability to pay.

The present policy also does not meet the Congressional intent set forth in the 1973 Amendment to the Rural Electrification Act (P.L.93-32, 87 STAT. 65) "...rural electric systems should be encouraged and assisted to develop their resources and ability to achieve the financial strength needed to satisfy their credit needs from their own financial organizations and other sources at reasonable rates and terms consistent with the loan applicant's ability to pay and the achievement of the Act's purposes."

Generation Capabilities

Question: There have been claims that there is a surplus amount of energy generation capability in rural America. To what degree of capacity are generating plants operating?

Answer: The following table shows electric borrower installed generating capacity at December 31, 1983, and the energy generated during 1983 by type of generating resource.

	Installed Capacity Megawatt-hour	Energy Generated Gigawatt-hour	Capacity Factor
Fossil Steam	21,456	86,422	.46
Nuclear Steam	1,018	3,450	.39
Internal Combustion	2,267	2,914	.15
Hydro	84	273	.37
Total	24,825	93,059	.43

Actual energy generated from the capacity owned by borrowers is influenced not only by the energy needs of the borrowers purchasing from the generating borrowers but also by the cost of fuel available to the generating borrowers and neighboring electric suppliers. Another measure of the use of generating capacity is the peak demand and reserve requirement of the individual system measured against its installed generating capacity that has not been committed to other sales. Precise information is not reported and kept by REA. From information available to us, we estimated the peak 1983 electric demand, reserve responsibility and committed capacity sales required approximately 19,500 MW of the 24,800 MW of installed generating capacity. The borrowers had an additional 8,300 MW of generating capacity under construction at that time.

Question: What percentage of capacity is intentionally unused in ordinary circumstances so that energy generation may be increased if another plant breaks down?

Answer: A generation reserve of between 15 and 20 percent of a period peak demand, normally a calendar or supply year, is normal in the electric industry. Systems with a very high period load factor--over 60 percent--would require a higher level of reserve capacity.

Question: Is there a sufficient number of generation and transmission facilities, and are they appropriately located to provide electricity to all of rural America? What would it take to get to that point? How many plants, strategically located, would provide this capability?

Answer: Generating systems that are REA borrowers operate interconnected with neighboring electric systems and for the most part each is a member of one of the National Electric Reliability Councils. Reports of the Councils indicate that additional strategically located transmission facilities could result in better utilization of the total electric generating capacity, fuel sources and alleviate specific local problems. At this time we do not believe that any electric borrowers are significantly impacted because of the location of existing generating plants and transmission facilities.

Question: What percentage of a consumer's rates are spent on generation and transmission and what percentage is spent on distribution?

Answer: A composite of reports from the distribution-type borrowers reflect that 67.9 percent of their total revenue was for power supply costs in calendar year 1983. This percentage has remained fairly constant the past 4 calendar years. However, it has increased from approximately 50 percent 10 years ago.

The distribution-type borrower reports also show that as an average 4.7 percent of their revenue dollar in 1983 was for their system's long-term interest expense. Long-term interest expense as percent of total revenue has not changed significantly during the past 10 years.

Obligation of Authorized Loans

Question: How much do you estimate will be obligated from fiscal year 1985 loan authorizations for each of your loan programs?

Answer: Currently, we are estimating the following obligations for Fiscal Year 1985.

Insured electric loans.......	$ 850,000,000
Insured telephone loans......	271,706,000 a/
Electric Loan Guarantees.....	1,200,000,000
Telephone Loan Guarantees....	235,000,000
Rural Telephone Bank Loans...	185,000,000

a/ Includes $21,706,000 carried over from FY 1984.

We are continuing to monitor applications from borrowers and will notify you of any projections different from these.

Question: If these do not reach the floor mandated in the appropriations bill, why will they not?

Answer: If they do not, it will be because borrowers are not applying for loans in the amounts authorized. There are many reasons why there has been a slowdown.

Mobile Telephone Services

Question: To what extent have cooperatives been able to expand into new technology markets such as paging and mobile telephone services?

Answer: REA policies permit the financing of mobile radiotelephone service to rural telephone companies and cooperatives. Because of the high cost of providing this service, the demand for it, by the public, has been very limited. We have provided financing to some rural telephone systems for both mobile radiotelephone service and paging services. The new technology in providing mobile radiotelephone service is called the "cellular" technology. It requires, at this time, significant capital investment and is being utilized primarily in urban and suburban areas. Some rural telephone systems have entered into financial partnerships with larger telephone systems to provide cellular mobile radiotelephone service in urban areas. There are new technological developments under study which may reduce the costs of providing mobile radiotelephone and paging services which could make these services more attractive to rural customers.

Question: What effect has deregulation had on co-op's eligibility to compete in existing markets?

Answer: The rural areas of our nation have not attracted new competitors in the telecommunications field. A number of rural telephone companies and cooperatives have entered new fields, such as providing CATV service, but in most instances it was because no one else was interested in providing these services.

Question: There is concern on the part of some companies that rural co-ops are now posing competition in these new technology areas. Are there regulations which restrict loans to cooperatives for the purpose of expanding into markets already being served by private companies? In your opinion, should there be restrictive provisions associated with REA loan programs to prevent duplication of services already being provided by private companies?

Answer: The Rural Electrification Act is very specific as to the purposes for which REA can provide financing. The definition of the term "telephone service" is very clear in the RE Act. There is also a nonduplication provision in the law which prohibits the Agency from financing lines, facilities or services already providing adequate telephone service. There is, however, a new national policy in regard to telecommunications which fosters the concept of competition in this field. We do not believe that we should prohibit a rural telephone company or cooperative from entering competitive fields merely because they have obtained financing from REA to extend telephone services to high cost-low density areas. In actual fact, the overwhelming majority of rural telephone companies and cooperatives entering competitive fields are doing so through subsidiary or affiliated corporations which have no financing from REA and over which REA has no controls.

QUESTIONS SUBMITTED BY SENATOR KASTEN

Question: How do electric rates in areas served by rural electric cooperatives in Wisconsin compare with those in areas served by investor-owned utilities in Wisconsin?

Answer: At the usage of 1,000 kWh/month/consumer all but one of Wisconsin's cooperatives charged residential rates higher than investor-owned utilities as of January 1, 1984. The average revenue at that level of usage was 6.9¢/kWh; the rates from various power companies ranged from 5.7¢ to 6.5¢/kWh.

Question: How do they compare with average rates nationally?

Answer: The national average residential revenue from rates in 1983 for all REA distribution borrowers was 6.7¢/kWh. The comparable figure for the investor-owned utilities was 7.2¢/kWh.

Question: What would be the likely impact on rural electric rates in Wisconsin of the Administration's proposal to greatly reduce REA's lending authority and to phase out the Agency by 1990?

Answer: The impact on rural electric distribution rates in Wisconsin would depend on several factors, including future capital needs and interest rates. This would impact rates over a period of time, but considering the fact that new loans would be blended with imbedded 2 percent and 5 percent outstanding loans--presently totalling $106.3 million--the effect would probably be both small and gradual. The largest expense impacting future retail rates is the cost of wholesale power; in 1983 this amounted to 69 percent of the distribution borrowers' revenues.

Question: One of the reasons many rural electric co-ops are in so much trouble is that all the estimates made 10 and 15 years ago about how demand for electricity would continue to rise during the rest of this century were wrong, suppose the current estimates of slow growth in demand for electricity are wrong. Will the Administration's budget proposal for REA allow the rural electric system enough flexibility in case electrical demand begins growing rapidly again at some point in the future?

Answer: One of the most difficult questions facing electric utility management is that of maintaining the integrity of the electric system, whether generation, transmission or distribution. Each type of facility has a different lead time for planning and construction. Within each type, lead times vary by type of facility. For instance the lead time for a combustion turbine is significantly shorter than for a nuclear unit. Considering today's cost of construction, generally each new increment of capacity carries a higher cost of construction than the average imbedded system cost. Generally, the additional facility would not bring with it any inherent cost reduction factors. Electric utility managements, including the REA borrowers, are very cognizant of the cost implications of new construction. In our opinion, the FY 86 budget proposal will accommodate the borrowers' needs. Present generating capacity, plus capacity under construction, will supply the power needs for the next 10-15 years, considering the current estimates of growth. Should electric demand begin a more rapid growth, the impact on planning would be after FY 86.

QUESTION SUBMITTED BY SENATOR CHILES

Question: As you're probably aware, the National Rural Electric Cooperative Association has written to Senator Helms, Chairman of the Agriculture Committee, proposing a 24% cut in the REA direct loan program and a 29% cut in the loan guarantee program.

The Senate Budget Committee has just approved in the '86 Budget Resolution, a 25% cut in both the direct loan and loan guarantee programs.

Recognizing that the demand for electric loans is down in this area, do you think the proposal for a 25% cut is fair?

Answer: We think that the REA insured electric loan levels can be reduced even further as we have recommended in the FY 1986 Budget.

SUBCOMMITTEE RECESS

Senator COCHRAN. Thank you. Our next hearing will be held on Tuesday, March 19, in this same room beginning at 10 a.m. At that time we will hear from representatives of the Animal and Plant Health Inspection Service, the Agricultural Marketing Service, and the Food Safety and Inspection Service. The hearing is in recess until that time.

[Whereupon, at 11:20 a.m., Thursday, March 14, the subcommittee was recessed, to reconvene at 10 a.m., Tuesday, March 19.]

AGRICULTURE, RURAL DEVELOPMENT, AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 1986

TUESDAY, MARCH 19, 1985

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, DC.

The subcommittee met at 10 a.m., in room SD–124, Dirksen Senate Office Building, Hon. Thad Cochran (chairman) presiding.

Present: Senators Cochran, Stennis, Burdick, McClure, Kasten, Sasser, and Harkin.

DEPARTMENT OF AGRICULTURE

ANIMAL AND PLANT HEALTH INSPECTION SERVICE

STATEMENTS OF:

- **KAREN DARLING, DEPUTY ASSISTANT SECRETARY FOR MARKETING AND INSPECTION SERVICES**
- **BERT W. HAWKINS, ADMINISTRATOR, ANIMAL AND PLANT HEALTH INSPECTION SERVICE**
- **DONALD L. HOUSTON, ADMINISTRATOR, FOOD SAFETY AND INSPECTION SERVICE**
- **JAMES C. HANDLEY, ADMINISTRATOR, AGRICULTURAL MARKETING SERVICE**

ACCOMPANIED BY:

- **HARVEY L. FORD, DEPUTY ADMINISTRATOR, PLANT PROTECTION AND QUARANTINE, ANIMAL AND PLANT HEALTH INSPECTION SERVICE**
- **JOHN K. ATWELL, DEPUTY ADMINISTRATOR, VETERINARY SERVICES, ANIMAL AND PLANT HEALTH INSPECTION SERVICE**
- **LARRY B. SLAGLE, DEPUTY ADMINISTRATOR, MANAGEMENT AND BUDGET, ANIMAL AND PLANT HEALTH INSPECTION SERVICE**
- **SAMUEL V. LADD, DIRECTOR, BUDGET AND ACCOUNTING DIVISION, ANIMAL AND PLANT HEALTH INSPECTION SERVICE**
- **ROBERT SHERMAN, BUDGET OFFICER, DEPARTMENT OF AGRICULTURE**

OPENING REMARKS

Senator COCHRAN. The subcommittee will please come to order. This morning we are going to be hearing from officials from the Animal and Plant Health Inspection Service, the Food Safety and Inspection Service, and the Agricultural Marketing Service of the Department of Agriculture. These all come under the jurisdiction of the Assistant Secretary for Marketing and Inspection Services.

The major objective of the Animal and Plant Health Inspection Service is to protect the animal and plant resources of the Nation from dangerous pests and diseases. To accomplish this, the agency carries out various surveys and diagnostic tests and conducts control and eradication programs. The mission of the Food Safety and Inspection Service is to ensure that the Nation's meat and poultry supply is safe, wholesome, and properly labeled and packaged. Programs of the Agricultural Marketing Service promote the orderly and efficient distribution of agricultural commodities.

Ms. Karen Darling, Deputy Assistant Secretary for Marketing and Inspection Services, is here this morning. She is accompanied by Bert Hawkins, Administrator of the Animal and Plant Health Inspection Service; Donald Houston, Administrator of Food Safety and Inspection Service; and James Handley, Administrator of the Agricultural Marketing Service.

We also have our budget officer, Bob Sherman, representing the Department. We are happy to have him here.

We have the prepared statements from each of the agencies for which we thank you. These will all be included as a part of the record in full.

We invite you to proceed and summarize those statements and make any other comments that you would choose to make. Miss Darling, you may proceed.

Ms. DARLING. Thank you, Mr. Chairman, members of the committee. It is a privilege to be here today to talk about three of the agencies that come under the Assistant Secretary for Marketing and Inspection. They each have a very short statement, after which we are prepared to accept any of your questions. We might as well begin in your order and start with Bert Hawkins, Administrator for the Animal and Plant Health Inspection Service.

PREPARED STATEMENT

Senator COCHRAN. Thank you. Mr. Hawkins, we will insert your prepared statement in the record at this point. You may summarize as you wish.

[The statement follows:]

STATEMENT OF BERT W. HAWKINS

Mr. Chairman, members of the Committee, it is a pleasure to appear before you to discuss the Fiscal Year (FY) 1986 budget for the Animal and Plant Health Inspection Service (APHIS). This Committee has always been supportive of our mission and you deserve much of the credit for making our agricultural system the healthiest in the world. I have with me today my Associate Administrator--Mr. James O. Lee, Jr.; our Deputy Administrators for Veterinary Services--Dr. John K. Atwell, for Plant Protection and Quarantine--Mr. Harvey L. Ford, and for Management and Budget--Mr. Larry B. Slagle; and the Director of the Budget and Accounting Division--Mr. Samuel V. Ladd. They can help with any technical questions you may have.

Principles for APHIS Decisionmaking

Last year I spoke of the challenge that APHIS and all Federal agencies face. That challenge--to provide vital services while holding the line on spending--is even tougher this year. It is a challenge made more difficult by the dynamic nature of agricultural pests and diseases. For example, in the past eighteen months we had to move quickly to respond to outbreaks of avian influenza and citrus canker, two diseases not seen in this country for decades. We also responded to Mexican and Oriental fruit fly outbreaks in California and a Mediterranean fruit fly infestation in Florida.

In order to meet the challenge of managing a Federal agency in the 1980's, we adhere to six principles in making difficult program and budget decisions. These principles allow a consistent approach in defining and applying the Federal role in pest and disease control. I would like to briefly explain these principles to you and then discuss how we have applied them in recent program actions and in developing the FY 1986 budget.

The first principle is to move quickly on important pest and disease threats as they occur. It is a simple fact that emerging threats cost less to control the earlier they are found. For APHIS this means preventing the entry of new pests and diseases and eradicating those which do sidestep our defenses before they become established. We accomplish this by maintaining a strong emergency response capability.

The second principle is to provide efficient services, responsive to the differing needs across the country. This has been a major concern of mine as Administrator of APHIS, a concern that grew from my experience as a rancher. We have to provide our services at the lowest possible cost and we have to see that those services actually meet the needs of the people we serve.

The third principle is to share responsibilities and decisionmaking with the States and industry. It is important that the States and industry do not rely on the Federal government to do the things they could do, and do as well, themselves. It is equally important that the Federal government not dictate to our partners in agricultural protection.

The fourth principle is to fulfill the Federal role. There are certain duties only a Federal agency can perform. The States and industry cannot do more if APHIS is not guarding against international and interstate movement of pests and diseases and providing national leadership in animal and plant health programs.

The fifth principle is to review ongoing programs for effectiveness, efficiency, and consistency with their original purpose. This includes an effort to keep headquarters activities streamlined and cost effective. With the challenge to provide vital services so crucial, we simply cannot afford to continue efforts that are not producing a reasonable return. We have to look for more efficient methods of dealing with some problems. We also have to consider reducing our level of activity in those programs where we have achieved a strong measure of control or where we do not have the tools to make a positive impact.

Finally, the sixth principle is to limit new projects to only the most essential and those where we can make real progress. We just cannot afford to deal with all the pest and disease problems in the country. Some are better handled by States and industry. Some do not pose a significant economic threat. Still others have no solution we can effectively apply. In order to maintain the resources for the problems that are significant and we can deal with, we believe it would be unwise to spend money on less essential efforts.

Successful Application of Principles

I would now like to talk about how we have applied these principles. The firs principle, quickly reacting to new threats, was evident in the avian influenza eradication effort. Over 1,000 APHIS employees worked in this program. I am happy to report that our efforts have been successful. After depopulating ove 17 million poultry in 448 flocks, we believe we have eradicated avian influenza. However, surveillance activities will continue for six months to assure that we have indeed eliminated all of the infection. Quarantines have been lifted and the poultry industry is getting back to normal in Pennsylvania New Jersey, Maryland, and Virginia after a very critical period. Our quick reaction and the cooperation of the States and industry were the keys to the program's success.

Another test of our emergency reaction capability is now underway on the plan disease side. Citrus canker disease was discovered in the heart of Florida's citrus growing region in August. Since that initial discovery, we have found eight more infected nurseries. So far we have not found the disease in any producing fruit groves. Should it enter the groves, the losses could be staggering, particularly on top of two consecutive winters of freezing weather. We have quickly reacted to the problem and have also employed the principle of sharing responsibilities with the State. We intend to share indemnity costs with Florida on a 50-50 basis. We are also sharing the costs of the massive survey, quarantine, and tree defoliation and destruction activities. Our current estimates indicate that over 7 million nursery plant and 600 thousand reset trees will be destroyed in an effort to prevent the disease from spreading. Due to the unpredictability of this disease--it is a new strain of citrus canker--we will not know for quite some time just how widespread the problem is. We will have to survey through FY 1987 before we can determine if all infection has been eliminated.

I mentioned my personal commitment to the principle of providing efficient services which are responsive to differing needs. We took a big step in that direction last year by implementing a new system of managing our resources. More decisionmaking authority now lies with the APHIS managers located in the individual States and regions. These managers are closest to the problems and they need the flexibility to quickly respond to them. Previously we made too many program and day to day budgetary decisions in Washington. By delegating more authority and simplifying paperwork and reporting requirements, our field managers--the men and women who actually direct our activities which touch the industry-- can do their jobs more efficiently and in a manner that truly serves our constituents.

One more recent activity I am proud to report on is the screwworm program. In July we reached our goal--six months ahead of schedule--of eradicating this pest north and west of the Isthmus of Tehuantepec in Mexico. We moved the barrier four times during FY 1984 as part of our drive for an early accomplishment of our goal. This represents the successful conclusion of a long effort, begun with State and industry cooperation, often upgraded through constant review and development of program techniques, and completed with international cooperation. Your consistent support of our program was the key ingredient. Now it is important that we safeguard the progress we have made by maintaining the barrier at Tehuantepec. The cost of maintaining the barrier, of course, is much less than attempting to control the screwworm at the U.S.-Mexico border.

FY 1986 Budget

Having discussed our recent accomplishments, I would now like to look at the FY 1986 budget. We are requesting $242,004,000 for our "Salaries and Expenses" appropriation, and $2,361,000 for our "Building and Facilities" appropriation. This represents a decrease of $35,037,000 from our FY 1985 appropriation. We also will propose legislation which would allow us to recover $12,298,000 in user fees for certain activities, further reducing the need for government outlays. If this legislation is enacted we would be able to reduce the budget request before this committee by a like amount. Our budget proposal reflects the six principles of agency management. We are requesting increases for programs which concentrate on clearly Federal roles and those which will enhance our quick reaction capability. We are proposing decreases for programs where we believe that States and industry can take a larger share of responsibilities, where we have achieved progress and a reduced level of funding is wise economically, and where we cannot prudently make use of funds due to the lack of effective technology. I believe that this budget will allow us to maintain an adequate level of overall agricultural protection and preserve our ability to perform our top priority functions of fulfilling the Federal role and quickly reacting to emerging serious threats.

Program Increases

We have two major increases on the plant protection side. One is for our agricultural quarantine inspection program. I am a strong believer in spending a penny to save a dollar. That is what this increase means. By improving our ability to keep pests and diseases out of the country, we save the high costs of eradication and prevent losses to the industry. As part of our effort to continually review our programs for efficiency, we have convened a blue ribbon panel of experts to investigate pest exclusion practices. I will report to you on their findings and the actions we take to implement their recommendations.

The other major increase on the plant side is for the Medfly eradication effort in Mexico and Guatemala. We lost some ground in 1983 when the Medfly reinfested Mexico after it seemed to be eradicated. Our research indicates that the problem is the massive Medfly populations in Guatemala. We need to increase our efforts in that country in order to reestablish eradication in Mexico and again provide a strong measure of protection for the United States.

On the animal health side we are proposing increases for two programs where the Federal role is essential to an effective partnership with States and industry for agricultural health protection. One is the animal health compliance and enforcement program, where we carry out a system of animal identification and enforce interstate movement regulations. This program is critical in preventing disease spread from one State to another through interstate commerce.

The other major animal health increase is for our animal disease and detection program. We are expanding the National Animal Disease Detection System to establish a systematic base of knowledge on disease problems and their economic impact. This is a cooperative program with the States and industry which will will give us the same animal health data capability that the Cooperative National Plant Pest Survey now provides for plant pests and diseases. The benefits of quick disease detection, which this program will help provide, represent a sound return on our investment.

The last major increase I would like to point out is for the contingency fund. I referred earlier to the dynamic nature of pests and diseases. Last year we faced outbreaks of avian influenza, citrus canker, and honey bee tracheal mite, in addition to small domestic Mexfly and Medfly infestations. In the more serious cases--avian influenza and citrus canker--the Secretary used his emergency transfer authority and redirected funds from the Commodity Credit Corporation. For the other unforeseen needs we had to make adjustments in our other operations to arrange adequate staffing and funding. By increasing the contingency fund we can move more quickly on pest and disease outbreaks and minimize any adverse impact on other APHIS programs or other Department agencies.

Program Decreases

We have achieved budget reductions through two avenues. The first is administrative actions. APHIS was part of an administrative reorganization of the agencies under Assistant Secretary McMillan last year. This achieved savings for six agencies by eliminating duplication of effort and assigning administrative duties to the locations and offices where they could be handled most efficiently. On the veterinary services side, we are realigning our regional structure, with a savings of the cost of one regional office.

Our review of ongoing programs led us to propose some decreases in current activities. We made these decisions in accordance with the principles I have discussed. In the screwworm program we are able to propose an $8,000,000 decrease--over 25 percent of the total program decrease--because we have reached our goal of eradication down to the Isthmus of Tehuantepec. While we are proposing a reduction in the level of Federal involvement in the brucellosis program, we remain committed to the goal of nationwide eradication. The brucellosis infection rate is now only 0.29 percent, and we feel it is appropriate for highly infected States to contribute a greater share of program financing. The other major decrease we are proposing is to eliminate our involvement in the animal welfare program. This function should be carried out by States, industry, and humane groups while Federal resources are devoted to protecting American agriculture from pests and diseases.

The other program decreases we are proposing are in areas we believe are better left to the States and industry due to their localized nature. This includes reducing the level of APHIS involvement in the boll weevil, grasshopper, imported fire ant, noxious weeds, pink bollworm, and witchweed programs.

In conclusion, Mr. Chairman, I would like to say that this is a sound budget, one that meets the challenge facing APHIS and the entire agricultural community. I am confident that we will maintain our tradition of excellent service and in fact improve our capability in some crucial areas. This budget will also contribute to the task you face in reducing the Federal deficit.

Mr. Chairman, my associates and I would be glad to answer any questions you might have.

INTRODUCTION OF ASSOCIATES

Mr. HAWKINS. Thank you, Karen, Mr. Chairman, other members. It is with a great deal of pleasure that I appear before you to present our 1986 budget. I am proud to do that because I personally feel that we have the best darn agency in the Federal Government.

Here with me this morning I also have my Deputy for Veterinary Services, Dr. John Atwell; Deputy for Plant Protection and Quarantine, Mr. Harvey Ford; Mr. Larry Slagle, Deputy for Management and Budget; and my budget officer, Mr. Sam Ladd.

AVIAN INFLUENZA

We are proud to relate a few success stories that this agency had in the 1984 calendar year. Perhaps the most significant was the eradication of avian influenza that plagued the poultry industry in Pennsylvania and Virginia, and caused smaller outbreaks in Maryland and New Jersey. Avian influenza has been eradicated, and the quarantine has been lifted, but we will continue to survey for any other outbreaks for approximately 6 more months.

CITRUS CANKER

We also had, as you know, Mr. Chairman, an outbreak of citrus canker in the State of Florida, the first time since about 1929 that this bacteria has entered the United States. It is a very devastating disease, and in the emergency eradication program we have had to destroy 7 million nursery plants and some 600,000 citrus reset trees. Nine separate nurseries were infected but, so far, we have not found any citrus canker in citrus groves. The State of Florida has cooperated fully, providing 50 percent of the funding. We appreciate the high level of cooperation of the State of Florida.

We are watching to see the effects of cold weather in Florida to see if it is masking the presence of bacteria. Continuous surveying will be necessary for the next 2 years.

SCREWWORM

One other success story that we have this year is the final eradication of the screwworm in Mexico down to the Isthmus of Tehuantepec, which was the goal established by Congress.

BUDGET REQUEST

In our budget before Congress, we are requesting a total budget outlay of $242,004,000 for salaries and expenses and $2,361,000 for buildings and facilities. This represents an approximate $35 million reduction from our 1985 funding level.

We are asking for small increases in those areas in which the Federal Government plays a predominant role.

We are identifying for decreases those areas which we feel that the State and industry affected should play a greater role than they have in the past. We will also be asking Congress for authority to charge approximately $12,298,000 in user fees.

I would like to also bring to your attention that we are decreasing our management and administrative costs by some 10 percent and are initiating a review of our staffing.

APHIS and five other agencies under the Assistant Secretary for Marketing and Inspection Services, have consolidated administrative support services under our lead. The affected agencies are and will continue to save approximately $1,300,000 annually due to this change.

Mr. Chairman, those are my abbreviated remarks. Of course, my colleagues and I will be glad to answer any questions. Thank you.

Senator COCHRAN. Thank you very much, Mr. Hawkins.

We have a number of Senators here at the hearing. I was going to proceed with the presentation of each of the agencies and then permit questions, but if some Senator would like to be recognized now, for any question, I would be glad to do so. I know there are other conflicts around the Hill, other hearings going on.

Senator McClure.

GRASSHOPPERS

Senator McCLURE. Thank you, Mr. Chairman. The Defense Subcommittee is also meeting and I would like to attend that meeting as well. But I did have some questions that I would like to ask Mr. Hawkins, dealing with APHIS operations.

As you know, last year we had, throughout the United States, an outbreak of grasshoppers. By the time the grasshoppers hatched and started moving off the Federal lands onto private lands, APHIS was out of money.

Mr. HAWKINS. That's correct.

Senator McCLURE. It wasn't able to do anything. We got a very modest amount of money put in the budget in addition, but we don't yet have any sufficient amount of funding, as I understand the problem.

Mr. Hawkins, let me outline the facts as I understand them. If the facts are at variance, this is a good time to get the facts corrected. My understanding is that your fall survey taken last fall would indicate nearly 56 million acres of potential infestation in 15 States.

Mr. HAWKINS. Yes, sir; that is based upon egg count.

GRASSHOPPER COST-SHARING

Senator McCLURE. You know if those eggs winter-over and hatch, you will have an infestation of epidemic proportions in at least 56 million acres.

Now, if those were all sprayed at an average cost of $3 per acre, on a cost-sharing of the kind that we used to have, the Federal share would be a little less than $19 million.

Mr. HAWKINS. That is correct, sir. I should also point out that those estimates are based on an anticipated infestation of 9.5 million acres. Based on past experience, it is highly unlikely that the total 56 million acres would need treatment.

Senator McCLURE. State and private share would bring it up to a little less than $30 million for application costs.

As I understand what you have now, the maximum available would be $1 million?

Mr. HAWKINS. That is correct, sir.

GRASSHOPPERS ON FEDERAL LANDS

Senator McCLURE. Including the amount of money that was added by my amendment last year. As I understand it, your attempt so far is to shift the responsibility for meeting that epidemic to other entities of government—State and local government—and to the private landowners.

Am I correct in stating that some years ago the Federal Government responsibility on Federal lands was met by direct budgeting through the Department of the Interior and the Department of Agriculture and the Forest Service?

Mr. HAWKINS. Yes, sir.

Senator McCLURE. In more recent years, that was shifted to your agency. Is that correct?

Mr. HAWKINS. The responsibility for this pest lies within my agency, that is correct.

Senator McCLURE. There is no independent funding by BLM or the Forest Service and transferred to your agency? The Federal responsibility then, Federal financial support, is entirely in your agency today?

Mr. HAWKINS. The Forest Service does have some funds to control forest insects. It is for forest lands, sir, not for range lands.

Senator McCLURE. So the Forest Service has range lands that are adjacent to private lands that would not be covered?

Mr. HAWKINS. That is correct, sir.

Senator McCLURE. The facts that I have given as for the degree and the extent of that infestation are correct? You don't have any argument with those facts?

Mr. HAWKINS. No, sir. I would like to reiterate that it would be very, very unusual if the total 56 million potentially infested acres actually became infested.

Senator McCLURE. Yes.

Mr. HAWKINS. Yes.

Senator McCLURE. You are familiar with the intention that I have in trying to give additional money to APHIS for the old kind of program in which the Federal Government would bear all of the costs on Federal lands, the States would pay 50 percent of the cost of intermingled State lands, and private landowners, where affected, would pay one-third of the cost of control?

Mr. HAWKINS. Yes, sir; I am aware of that.

ADMINISTRATION OF GRASSHOPPER PROGRAM

Senator McClure. Are you prepared or are you capable of administering that program this spring in areas of infestation if the money is made available to you on that basis?

Mr. Hawkins. Yes, sir.

Senator McClure. What is the timing at which that money must be made available so you can do the job, if called upon?

Mr. Hawkins. Mid-April, Senator.

Senator McClure. That is when you would have to do the application?

Mr. Hawkins. That is when we would start in some of the States if they were infested, yes, sir.

COORDINATION OF GRASSHOPPER PROGRAM

Senator McClure. Hasn't our experience indicated that where private lands are involved, and you have to get cooperative agreements and cooperative programs in place, that you have a 60- or 90-day period which is necessary to get it done, prior to the time you apply the insecticide?

Mr. Hawkins. It would depend on the speed in which the private sector or the States would operate, yes, sir.

Senator McClure. Our experience in the past is that it takes about that long to get all the entities coordinated, including the private beekeepers and others who are affected in other ways, so people have adequate notice that it might happen, that it is going to happen, that this is what they ought to do to prepare their own actions.

If we don't provide the additional money in the manner that I have outlined, you will be totally incapable of dealing with that infestation, will you not?

Mr. Hawkins. Again, I would have to say, Senator, it would depend on the severity of the outbreak. It would depend on the weather conditions, which are critical in grasshopper outbreaks.

I would say that with the amount of money that we outlined, if the affected States and/or local governments did not see fit to do as we outlined earlier, we would not have sufficient funding.

STATE FUNDING OF GRASSHOPPER CONTROL

Senator McClure. The only plan that has been suggested to the States so far is that they take the money that may have been paid to them in the Payment-in-Lieu-of-Taxes Program and use that to meet the threat, even though it happens to arise on Federal lands.

Mr. Hawkins. Yes, sir.

Senator McClure. Is that correct?

Mr. Hawkins. The funds are derived from those lands, yes, sir.

Senator McClure. That is the suggestion that has been made to them. Have you had any States to say that is a good idea?

Mr. Hawkins. No, sir; I am not No. 1 on the most popular list.

Senator McClure. As a matter of fact, they rather vigorously and uniformly and unanimously have said that this is not a winner.

Mr. Hawkins. I didn't expect any less, Senator, but I felt it the duty of my agency to inform them of our intentions, what we could do, and allow them time to react.

Senator McClure. Now certainly, the weather is the critical factor. But your experts in the field making egg counts have said that the potential for an outbreak is severe, is that not correct?

Mr. Hawkins. That is correct, sir.

Senator McClure. A severe outbreak can be measured as it was last year in some areas, is that not correct?

Mr. Hawkins. Yes, sir.

Senator McClure. The damage and the infestation we had?

Mr. Hawkins. I would say that's right, sir.

FEDERAL RESPONSIBILITY

Senator McClure. This committee has heard me speak before, and so have you, about what actually happened in some of those areas. I just have to tell you, Mr. Hawkins, that I think the administration's proposals in this area simply don't meet the threat.

The Federal Government insists on owning that land. The taxpayers of the United States insist on maintaining that ownership, and yet don't want to pay the cost of being the stewards of that land. To suggest that a payment made to the State in lieu of taxes on land owned by the Federal Government ought to be turned around and obligated to the care of that land tells me that the Federal Government is not yet a good steward of its own land. That is where the infestation occurs. That is where the damage comes from. You know that.

Mr. Hawkins. Yes, sir.

INTERMINGLING OF PUBLIC AND PRIVATE LANDS

Senator McClure. You are a neighbor of mine out home. I live just across the river. We have the same constituents, the same kind of background. We understand the same kind of ranching intermingling of public and private lands.

Mr. Hawkins. Yes, sir.

Senator McClure. When there are hordes of grasshoppers moving off the Federal lands and onto private lands, they can be devastating to the incomes of the people who live there. Isn't that right?

Mr. Hawkins. That is very true, sir. Grasshoppers are very hard to restrict.

Senator McClure. If they come, they come.

Mr. Hawkins. Yes, sir.

Senator McClure. If you are not prepared, then it is just as tough on those guys who just happen to live next to a bad neighbor.

Mr. Hawkins. Yes, sir.

Senator McClure. Thank you, Mr. Chairman.

Senator COCHRAN. Are there any other Senators seeking recognition at this particular time?

Senator Kasten.

BRUCELLOSIS ERADICATION

Senator KASTEN. Senator, I am going to try to be here for a little bit more of the hearing. I would just like to ask Mr. Hawkins a question specifically on brucellosis eradication. We are seeing a significant reduction in the administration's budget request for this program from $73.4 million last year to only $58.5 million this year.

This is a significant reduction. Would you say that this is a problem that you have gotten hold of and that you are no longer concerned about it?

Mr. HAWKINS. We are still concerned about it, but it is a problem that we are fast getting hold of. We submitted a budget last year in the neighborhood of $63 million, and I believe that this $58 million is sufficient to carry on a very viable brucellosis program, because the incidence of the disease has been reduced.

The number of States that have a significant problem is declining to where we have some 40 States that are either free or class A. The rate of incidence is very low in those States.

Senator KASTEN. We are free right now in Wisconsin and many other States. I think Kansas has made some progress recently and some other States as well; but do you believe that at this lower funding level you can assure States like Wisconsin that are now brucellosis free, that they are not going to see, with the reductions in this program, an increased incidence of brucellosis?

I'm concerned that the lower funding levels might increase the likelihood that infected cattle from other States might spread the disease in Wisconsin.

Mr. HAWKINS. I can assure you that the rate of infection in the United States will be reduced this year.

Now, I would not be so bold to say that it might not jump the barrier in some particular area, because that is always a risk. So long as we have any brucellosis in the United States, that could happen. But we can reduce and will reduce the rate of infection in the United States, yes, sir.

Senator KASTEN. Mr. Chairman, I have a couple of other questions which I would like to submit for the record. I appreciate very much the opportunity to ask this question.

Senator COCHRAN. Thank you, Senator. Dr. Houston, Administrator of the Food Safety and Inspection Service.

FOOD SAFETY AND INSPECTION SERVICE

Dr. HOUSTON. Thank you, Mr. Chairman. I am pleased to return to this committee today to discuss the fiscal year 1986 budget for the Food Safety and Inspection Service [FSIS]. As you know, these are extraordinary times for the Federal Government. The administration is committed to controlling spending to control the deficit.

COST REDUCTION EFFORTS

For the past several years, FSIS, along with every other Federal program, has come under scrutiny designed to spot any signs of waste or inefficient use of funds.

However, today's budget climate demands even more. Policymakers are looking at alternative funding sources to help defray the spiraling costs of Federal programs.

We at FSIS fully recognize the importance of this effort as well as the greater need and support for a strong Federal meat and poultry inspection program. Our budget request for fiscal year 1986 reflects these concerns.

Our request for $347.8 million for fiscal year 1986 provides for no program enhancements or growth. However, it does maintain the integrity of the program. It reflects a 5-percent reduction in the salaries of Federal workers, which has been proposed Governmentwide.

LEGISLATIVE PROPOSAL

We are also planning to submit a legislative proposal for the institution of user fees, requiring industry to pay for the inspection services provided. Under this proposed change in the Federal meat and poultry inspection acts, the Government would be able to recoup full program costs.

Our plans for implementation of fees assume a 3-year phase-in period with full cost recovery beginning in fiscal year 1988. We would still come before this committee, however, to secure appropriations for our programs, as the funds derived from user fees would go directly to the U.S. Treasury.

PRODUCTIVITY IMPROVEMENTS

During fiscal year 1984, the Food Safety and Inspection Service continued to uphold the traditional principles of meat and poultry inspection, while constantly seeking more efficient, yet equally effective ways to carry out our mandate.

In 1984, we inspected more than 36 million cattle and calves, almost 79 million swine, and over 6 million goats, sheep, lambs, and equines. We also inspected almost 4.6 billion birds.

In the processing area, 70 billion pounds of meat products and almost 50 billion pounds of poultry products were inspected. Our scientists analyzed almost 241,000 meat and poultry samples to make such determinations as product species and the presence of food additives, chemical residues, and disease.

Also, FSIS inspectors monitored the importation of 2.2 billion pounds of foreign meat and poultry products. Forty-three countries are presently eligible to export to this country. About 94 percent of imported product comes from 10 nations.

PROGRAM INTEGRITY

Last year, when I came before this committee to discuss significant new efforts to maintain consumer confidence in the Nation's meat and poultry supply, publicity and the media and public interest groups had focused on questionable practices in that small segment of the meat and poultry industry that consistently operated less than satisfactory plants.

You supported our efforts to strengthen the integrity of the inspection program with a budget increase which will enable us to hire 35 additional compliance officers and 4 support staff by the end of fiscal year 1985. As we go forward with this effort, we already have 140 full-time employees in this area as compared to about 110 midyear in 1984.

During fiscal year 1986, when all hires are on board and trained, we anticipate conducting 48,000 compliance reviews, up from 40,000 in fiscal year 1983. The new compliance officers will also play a role in other agency initiatives such as detection and documentation of significant violations; in inquiries supporting withdrawals of inspection; monitoring of foreign products that have been refused entry; and monitoring of contamination incidents or other emergency situations.

FIVE-POINT PROGRAM

We also described at last year's hearings a major undertaking within the agency designed to ensure that a level of consumer protection is maintained. I would like to provide an update of our implementation of our five-point program.

First was the proposal to increase withdrawal authority. In May 1984, we submitted to Congress a legislative proposal that would increase USDA's authority to withdraw or refuse inspection. However, no action was taken on it before the 98th Congress ended. A similar legislative proposal is undergoing clearance at this time and will be submitted to Congress shortly.

The second point was an intensified regulatory enforcement effort. FSIS initiated an Intensified Regulatory Enforcement [IRE] Program for plants that consistently fail to operate within acceptable regulatory bounds. In February 1984, the agency placed the first 14 plants under IRE, tailoring individual inspection plans to specific problems in each plant. A total of 21 plants have been in the program. We believe this is one of the most effective tools yet developed to handle marginal operations. Currently, 12 plants are under this program.

The third related to a National Academy of Sciences review. FSIS contracted with the National Academy of Sciences for a thorough review of the effectiveness of existing and proposed inspection approaches. The academy study, scheduled for completion in mid-1985, will provide an independent assessment of the integrity of the agency's modernization program.

The fourth was a Federal procurement review. Firms desiring to sell meat and poultry products to the Federal Government must meet tight eligibility requirements implemented by USDA's Agricultural Marketing Service. Under these rules, plants under IRE designation cannot sell to the Government.

Last was increased liaison with the Department of Justice. FSIS is cooperating with other USDA units in increasing liaison with the Department of Justice to more actively pursue criminal prosecution and other sanctions for those who violate Federal inspection laws.

CATTLE KING INCIDENT

While we have been working to improve our controls over all problems in meat plants, much attention has been focused this year on one meatpacker in particular and the three plants owned by his family. Of course, I am referring to the infamous Cattle King incident.

To date, 10 former Cattle King owners, officials, and employees have been convicted and sentenced for violations of the Federal Meat Inspection Act. The owner of Cattle King was sentenced to 6 years in jail and fined $70,000.

Also, a USDA administrative law judge found that Cattle King had processed adulterated meat, had used cattle that had died other than by slaughter, and had concealed these activities from FSIS inspectors. The judge ordered inspection services withdrawn from the Cattle King Co. and two affiliated plants owned by the Stanko family: The Stanko Packing Co. of Gering, NE, and Nebraska Beef Processors of Gordon, NE.

The judge concluded that, in addition to the current violations, firms affiliated with the Stanko family had violated a consent order entered into to avoid inspection withdrawal from earlier court convictions. In recent months, Cattle King has voluntarily closed. The Gering plant was sold and the Gordon plant was being leased to another firm.

PREPARED STATEMENT

Mr. Chairman, I will stop at this point, since the remainder of my testimony covers general areas of progress over the past year but will be included as part of the record.

Senator COCHRAN. Thank you very much, Dr. Houston.

[The statement follows:]

STATEMENT OF DR. DONALD L. HOUSTON

Mr. Chairman, I am pleased to return to this committee to discuss the FY 1986 budget for the Food Safety and Inspection Service (FSIS).

These are extraordinary times for the Federal government. The Administration is committed to controlling spending to trim the deficit. For the past several years, FSIS, along with every other Federal program, has come under intense scrutiny designed to spot any signs of waste or inefficient use of funds. However, today's budget climate demands even more -- policymakers are looking at alternative funding sources to help defray the spiraling costs of Federal programs.

We at FSIS fully recognize the importance of this effort, as well as the great need and support for a strong Federal meat and poultry inspection program. Our budget request for FY 1986 reflects these concerns.

Our current law request of $347.8 million for FY 1986 provides for no program enhancements or growth. However, it does maintain the integrity of the program. It reflects a five percent reduction in the salaries of Federal workers and other management savings proposed government-wide.

We are also planning to submit a legislative proposal for the institution of user fees, requiring industry to pay for the inspection services provided. Under this proposed change in the Federal meat and poultry inspection acts, the government would be able to recoup full program costs. Our plans for implementation of fees assume a three year phase-in period, with full cost recovery beginning in FY 1988. We would still come before this committee, however, to secure appropriations for our programs, as the funds derived from user fees would go directly to the U.S. Treasury.

During FY 1984, the Food Safety and Inspection Service continued to uphold the traditional principles of meat and poultry inspection, while constantly seeking more efficient yet equally effective ways to carry out our mandate.

In FY 1984 we inspected more than 36 million cattle and calves, almost 79 million swine, and over six million goats, sheep, lambs, and equines. Of these, one-third of one percent or 421,000 head, were condemned. We also inspected almost 4.6 billion birds, including young and mature chickens, turkeys and ducks. About 42 million birds -- less than one percent of the total inspected

-- were condemned. In the processing area, 70 billion pounds of meat products and almost 50 billion pounds of poultry products were inspected.

In addition, FSIS personnel reviewed almost 130,000 meat and poultry product labels, over 3,000 blueprints of plant facilities, and more than 2,800 drawings of equipment specifications. Our scientists analyzed almost 241,000 meat and poultry samples to make such determinations as product species and the presence of food additives, chemical residues and diseases. These analyses include nearly 24,000 of the newly instituted Calf Antibiotic and Sulfa Test -- CAST -- a quick screening test aimed at controlling drug residues in "bob" veal calves; and 7,000 of our rapid multi-species inplant tests for antibiotics (STOP, for Swab Test on Premises).

One of the major programs offering support to our inspectors in the field is our compliance program. Compliance officers investigate illegal activities in the plants, as well as enforce inspection laws throughout food distribution channels. In FY 1984, FSIS initiated 850 detention actions involving over 5.9 million pounds of suspect meat and poultry products. We monitored 12 recalls of nearly 154,000 pounds of product. Another 54,700 pounds were seized in four court actions initiated by the agency.

During FY 1984, FSIS conducted independent inquiries into 542 possible violations of the inspection laws and referred 16 other cases to USDA's Office of the Inspector General. USDA's Office of the General Counsel referred 26 cases documented by FSIS to the U.S. Attorney with a recommendation for prosecution.

FSIS is responsible for the safety of not only domestically produced meat and poultry but for foreign products imported into this country as well. Upgrading our import inspection program has been a major effort for the agency and I will discuss that in detail later in the testimony.

During 1984, FSIS inspectors monitored the importation of 2.2 billion pounds of foreign meat and poultry products. Nearly 16.5 million pounds of product was refused entry into this country because it did not meet our scientifically grounded standards. Forty-three countries are presently eligible to export to this country, although 94 percent of imported product comes from 10 nations.

PROGRESS ON MAJOR COMMITMENTS

PROGRAM INTEGRITY

Last year I came before this committee to discuss significant new efforts to maintain consumer confidence in the nation's meat and poultry supply. Publicity from the media and public interest groups had focused on questionable practices in that small segment of the meat and poultry industries that consistently operated less-than-satisfactory plants.

You supported our efforts to strengthen the integrity of the inspection program with a budget increase, which will enable us to hire 35 additional compliance officers and 4 support staff by the end of FY 1985. As we go forward with this effort, we already have over 140 full-time employees in this area, as compared with about 110 mid-year 1984.

Those additional employees will permit us to carry out an increasing number of compliance reviews -- our basic method of monitoring compliance with regulations by the meat and poultry industries and by the transportation and storage industries. During FY 1986, when all hires are on board and trained, we anticipate conducting 48,000 compliance reviews, up from 40,000 in FY 1983.

The new compliance officers will also play a role in other agency initiatives, such as detection and documentation of significant violations; inquiries supporting withdrawals of inspection; monitoring of foreign products that have been "refused entry;" and monitoring of contamination incidents or other emergency situations.

We also described at last year's hearings a major undertaking within the agency designed to insure that our level of consumer protection is maintained. I would like to provide an update on our implementation of our "Five-Point Program":

PROPOSAL TO INCREASE WITHDRAWAL AUTHORITY: In May of 1984, we submitted to Congress a legislative proposal that increases USDA's authority to withdraw or refuse inspection; however, no action was taken on it before the 98th Congress ended. A similar legislative proposal is undergoing clearance at this time and will be submitted to Congress shortly.

The proposed legislation would expand the grounds on which the Secretary can withdraw or refuse inspection service based on a determination of unfitness to include (1) a somewhat broader set of criminal convictions and (2) threats or actual assaults on or other interference with program employees. Inspection service also could be withdrawn or refused based on recurring failure to comply with sanitation or other requirements. In addition, if necessary to protect consumers' health or welfare or to assure the safe and effective performance of official duties, the Secretary could suspend or deny inspection service, pending administrative and judicial review.

INTENSIFIED REGULATORY ENFORCEMENT: FSIS initiated an Intensified Regulatory Enforcement (IRE) program for plants that consistently fail to operate within acceptable regulatory bounds. In February 1984, the agency placed the first 14 plants under IRE, tailoring individual inspection plans to specific problems in each plant. A total of 21 plants have been in the program. We believe this is one of the most effective tools yet developed to handle marginal operations. Currently, 12 plants are under IRE.

NATIONAL ACADEMY OF SCIENCES REVIEW: FSIS contracted with the National Academy of Sciences (NAS) for a thorough review of the effectiveness of existing and proposed inspection approaches. In recent years, FSIS has modernized inspection with new more efficient procedures that are as effective as traditional procedures. Some have criticized these changes, however, as simply an attempt to advance government and industry productivity. The NAS study -- scheduled for completion in mid-1985 -- will provide an independent assessment of the integrity of the agency's modernization program.

FEDERAL PROCUREMENT REVIEW: Firms desiring to sell meat and poultry products to the Federal government must meet tightened eligibility requirements, implemented by USDA's Agricultural Marketing Service. Under these rules, plants under IRE designation cannot sell to the government.

INCREASED LIAISON WITH DEPARTMENT OF JUSTICE: FSIS is cooperating with other USDA units in increasing liaison with the Department of Justice to more actively pursue criminal prosecution and other sanctions for those who violate Federal inspection laws. Although USDA may recommend prosecution, the Justice Department makes the final determination.

While we have been working to improve our controls over all problem meat plants, much attention has been focused this year on one meat packer in particular and the three plants owned by his family.

In a well-publicized case, FSIS determined that 7.6 million pounds of ground beef originally earmarked for the National School Lunch Program was adulterated and could not be used for human food. The Cattle King Packing Company of Denver, Colo., processed the meat from late 1981 to September 1983.

A USDA administrative law judge found that Cattle King had processed adulterated meat, had used cattle that died other than by slaughter, and had concealed these activities from FSIS inspectors. The judge ordered inspection services withdrawn from Cattle King Co. and two affiliated plants owned by the Stanko family -- the Stanko Packing Co. Inc, Gering, Neb., and Nebraska Beef Processors, Gordon, Neb. The judge concluded that, in addition to the current violations, firms affiliated with the Stanko family had violated a consent order entered into to avoid inspection withdrawal for earlier court convictions. In recent months Cattle King has voluntarily closed, the Gering plant was sold, and the Gordon plant is being leased to another firm.

To date, 10 former Cattle King owners, officials and employees have been convicted and sentenced for violations of the Federal Meat Inspection Act. The owner of Cattle King was sentenced to six years in jail and fined $70,000.

USDA is seeking a refund of nearly $28 million from the Stanko plants for the 26 million pounds of beef they processed under Federal contracts during the 1981 to 1983 period. The hamburger produced by Cattle King, and held by FSIS since September 1981, is being sold for non-human consumption.

IMPORT INSPECTION

Over the past several years FSIS has undertaken several initiatives in the import inspection program. You showed us your support for these activities with a budget increase for import inspection last year. We have continued our efforts to strengthen this vital area of inspection, and have begun to plan an important restructuring of the agency to improve management control over import inspection.

By law, FSIS has the responsiblity to ensure that imported product meets the same rigid standards as domestic product. This objective is carried out through two main activities: (1) the review of foreign inspection programs, including the determination of the eligibility of countries to export meat or poultry products to the United States; and (2) port-of-entry inspection.

Over the years, both of the activities were carried out by the same operational unit responsible for the domestic inspection program. In 1982, however, the first function was given special emphasis by placing it in a new unit known as International Programs (IP). IP also included a new export coordinating function. Port-of-entry inspection continued to be a specialized function within the domestic program.

This separation of functions, however, began to present management problems. This year, we began to develop a plan to consolidate the two activities within International Programs. Approximately 105 inspector positions, a small percentage of the 8,000 inspectors stationed around the country, would be transferred to IP.

This realignment will strengthen the inspection of imported product through improved coordination of the entire effort. Not only will IP be responsible for setting policy and procedures for import inspection and evaluating foreign inspection systems, but it will also oversee the actual performance of inspection duties associated with import inspection. IP's new responsibilities would include activities such as granting and withdrawal of approval for import establishments, assuring compliance with standards for approved facilities and equipment, performing inspection of incoming lots, and maintaining security over uninspected and rejected lots.

In addition, work is underway to develop a sophisticated computer-assisted system that will correlate the findings of foreign inspection system reviews and port-of-entry inspection. This process is expected to enhance the overall effectiveness and efficiency of both operations.

Other steps taken to modernize and strengthen the import inspection program include the following:

FOREIGN PROGRAM EQUIVALENCE: All countries which export to the U.S. are now in substantial compliance with the requirements of the 1981 Farm Bill. The Federal Meat Inspection Act applies the same requirements to imported and domestic products; as amended by the 1981 Farm Bill, it requires residue testing at slaughter and species verification of imports. In 1983 we completed special program reviews of major countries exporting to the United States to determine if they met the Farm Bill requirements. After repeated notifications and technical assistance, six countries were removed from the list of eligible exporters: the Dominican Republic, El Salvador, Haiti, Mexico, Nicaragua, and

Panama. Panama, El Salvador and Nicaragua corrected their deficiencies and are now again eligible to export their products to the United States.

TRAINING AND SUPERVISION: USDA held seven formal training classes for import inspectors and two classes for documents examiners during FY 1984. All inspectors at major ports-of-entry have now been trained in classification of defects, completion of forms, compliance-based inspection and examination of import documents. Scientists and technicians from foreign countries have also been trained in chemical laboratory procedures.

REFUSED-ENTRY PROCEDURES: In July 1984 FSIS published an interim final rule expressly prohibiting reentry into the United States of imported meat and poultry products that have been refused entry by USDA inspectors. Investigations revealed that some exporters had been circumventing import regulations in force since 1982. Enforcement of the new regulation should end such evasions of regulatory intent.

SLAUGHTER INSPECTION

The agency has faced a difficult situation in carrying out slaughter inspection for several years, prompted for the most part by vacancies that we were unable to fill. The required duties are always carried out, but they are being provided by relief inspectors, on-call "intermittents," or -- when absolutely necessary -- by the doubling or tripling up of full-time inspectors, or by the reassignment of processing inspectors to the slaughter floor.

With the additional funds provided in the FY 1985 budget, FSIS has begun an aggressive hiring program. By the end of the year, we plan to have an additional 130 full-time permanent slaughter inspectors on board, along with about 100 more intermittent inspectors. These must be recruited along with the new inspectors to fill the positions of 400 slaughter inspectors we normally lose annually by attrition.

RECENT ACCOMPLISHMENTS

Improved Slaughter Inspection Systems: FSIS is taking a new direction in slaughter inspection by combining new slaughter inspection procedures with plant-operated partial quality control (QC) programs designed to ensure that carcasses are properly processed. Under the QC programs, plants periodically check carcasses at critical points during evisceration and processing procedures, and record their findings. FSIS monitors the QC program by periodically sampling carcasses and verifying that the plant made the appropriate checks of the critical control points. These new systems of inspection will allow USDA to concentrate its resources on disease detection and on monitoring the approved quality control programs.

Beginning last November, plants were permitted to request this new postmortem inspection system for slaughtering broilers and cornish game hens. Under the New Line Speed (NELS) system, production linespeeds can increase to 91 birds per minute, a 75 percent gain over linespeeds of several years ago. This has been accomplished with no decrease in product quality.

Five plants are operating under this new system (four of them were pilot plants while the rule was being developed), and one more plant has been added since November. Several others have expressed interest in changing to the faster system since the new rule has been in effect.

Discretionary Inspection Legislation: FSIS is continuing to work with Congress to gain greater flexibility in allocating its inspection resources in processing plants. With the increased ability to tailor the degree of inspection to the needs of a particular plant -- based on factors such as the nature of its operations, its past compliance history and its current product monitoring system -- the agency could use its resources more efficiently and economically, without reducing effectiveness. A legislative proposal was introduced during the 98th Congress, but no action was taken. USDA plans to resubmit the proposal during the 99th Congress.

Guidelines for Aseptic Processing and Packaging: Recognizing the potential for aseptic processing and packaging in the meat and poultry industry, FSIS in July issued guidelines for the design and control of such systems in federally inspected plants. This processing innovation involves the placing of a commercially sterile product into a sterilized container in an environment free of microorganisms. The container is then hermetically sealed with a sterilized closure.

The guidelines require prior approval of a proposed system for aseptic processing and packaging, including a partial quality control program. The guidelines set requirements for equipment, processing controls and system testing.

Restaurant Central Kitchens Exemption: FSIS has published proposed regulations to implement legislation passed by the 98th Congress, which exempts restaurant central kitchens from Federal meat and poultry processing inspection requirements if the kitchens prepare ready-to-eat products only for service at restaurants owned or operated by the same person. Under the legislation, USDA retains the authority to impose Federal inspection requirements if a restaurant central kitchen facility's conditions or procedures result in product adulteration.

Modernized Controls for Cured Pork Products: Beginning next month, USDA will regulate the amount of added water and other substances in ham and other cured pork products by requiring minimum meat protein levels on a fat-free basis (PFF). The agency determined that measuring meat protein in finished cured pork products instead of estimating the amount of curing solution used in processing them -- the present regulatory technique -- will provide a more accurate basis for determining compliance with Federal standards. The new controls will also allow the industry to market a wider variety of products. Some plants have already begun to operate under the new system.

Poultry Chiller Water Reuse: In March, FSIS issued regulations that permit poultry processing plants to reduce the amount of fresh water intake required for continuous poultry chillers. The regulations provide for specific controls which ensure that the wholesomeness of the product is not threatened. The fresh water must be supplemented by enough high-quality reconditioned chiller water that the bacterial load on carcasses leaving the chiller is not greater than under all-fresh water chillers. The new rules were designed to reduce costs related to water use, chilling and disposal.

Upgrading Employee Skills: The agency's comprehensive Continuing Education (CE) program continues to provide FSIS employees with the opportunity to better handle emerging issues and carry out their important inspection responsibilities. Operating under the umbrella of six "schools," CE now includes over 130 programs of study. Through the CE program, 25 employees are studying to become Certified Quality Control Engineers. A symposium on food irradiation drew approximately 100 participants, with many others viewing the videotapes of the speakers. Several video-teleconferences broadcast to over 20 colleges around the country for viewing by FSIS employees and others have focused on subjects such as the impact of biotechnology and future directions for the agency.

Meat and Poultry Hotline: The FSIS meat and poultry hotline answers consumer questions about food safety and labeling. During FY 1984, the hotline was made accessible to hearing-impaired persons by adding new equipment and a special telephone number. During FY 1985, following a successful 1984 regional test of a toll-free hotline, a national toll-free number will be inaugurated.

Improving Export Opportunities: In its continuing effort to reduce trade barriers caused by conflicting regulations, FSIS established a new position of Export Advisor in October 1984. The advisor will provide an ongoing U.S. veterinary link with inspection officials in the Middle East, the Far East and Southeast Asia. A literal application of some regulations in these countries could seriously hamper U.S. export trade or impose unnecessary financial burdens on the U.S. industry. The advisor has already visited Saudi Arabia, United Arab Emirates, Bahrain, and Kuwait, discussing USDA certification programs and product labeling and standards.

In 1984, FSIS continued its efforts to facilitate the export of U.S. meat and poultry products by negotiating with the European Economic Community (EEC) for the acceptance of U.S. inspection requirements as equivalent to the Third Country Directive requirements. Following high-level policy discussion with EEC officials, USDA nominated some 500 U.S. establishments as interested in continuing exports to Europe. EEC officials began reviews of those establishments; policy discussions are expected to follow completion of the reviews in 1985.

Controlling Drug Residues in "Bob" Veal Calves: Last summer FSIS began an intensive, in-plant regulatory program to stem the incidence of high levels of antibiotic and sulfa residues in "bob" veal calves (calves up to 3 weeks old or weighing less than 150 pounds). Because of extensive educational activities by USDA and industry groups before the emergency rule was published in June, this program is bringing the residue problem under control and is being accepted by the industry. Under the rule, FSIS inspectors in 150 veal plants are passing or condemning carcasses based on a test newly developed by FSIS scientists, which is performed at the plant -- providing results in hours rather than days. When violations are detected, carcasses are condemned, and USDA traces the source of the problem. Subsequent animals from the same producer are tested before the meat can be released from the plant.

Mr. Chairman, this completes my prepared statement. I will be happy to answer any questions you or other committee members may have.

AGRICULTURAL MARKETING SERVICE

Senator COCHRAN. We will now hear from James Handley, the Administrator of the Agricultural Marketing Service.

Mr. HANDLEY. Thank you, Mr. Chairman. I do appreciate the opportunity to meet with you and the members of the committee to discuss the programs of the Agricultural Marketing Service [AMS] and specifically our budget request for fiscal year 1986.

First I would like to introduce my associates who are accompanying me: William Manley, Deputy Administrator for Program Operations; Eddie Kimbrell, Deputy Administrator for Commodity Programs; John Reeves, Deputy Administrator for Management; and Joseph Roeder, Director of our Financial Management Division.

Before addressing the specifics of our budget proposal, I would like to briefly mention the purpose and activities of our agency. I'd also like to apprise you of reorganizations we've undergone during the past year and additional responsibilities that we have assumed during this time period.

AGENCY PURPOSE

AMS programs promote the fair, orderly, and efficient distribution of products from the Nation's farms to consumers. This mission is carried out through the development and use of commodity standards in our voluntary grading services; the collection, analysis, and dissemination of market news information; administration of fruit, vegetable and dairy marketing orders; and various regulatory activities.

The structure of our agency has changed somewhat since the last time we testified before the committee. Certain programs and administrative support functions have been transferred to other agencies within the Department.

In May 1984, the authority to examine and oversee the warehouse industry was transferred from AMS to the Agricultural Stabilization and Conservation Service. In October 1984, we completed a consolidation of all nonpolicy process oriented or administrative support activities for AMS into the Animal and Plant Health Inspection Service. Both of these reorganizations will improve the overall efficiency and effectiveness of the Department.

Since last year, our responsibilities have been broadened because of recent legislative changes. The Dairy and Tobacco Adjustment Act of 1983 placed additional responsibilities on AMS. In July 1984, we began inspection of all imported tobacco, except oriental and cigar types.

The information generated from this program will assist Congress in overseeing the No Net Cost Tobacco Program, will enhance the effectiveness of the customs operations relating to tobacco, and will act as a source for adjusting price supports to make American tobacco more competitive on the world market.

The National Dairy Promotion and Research Board was also established by the Dairy and Tobacco Adjustment Act of 1983 as part of a comprehensive strategy to reduce milk supplies and increase consumption of milk and dairy products.

The purpose of this board is to establish a coordinated promotional effort designed to strengthen the dairy industry's position in the marketplace, to expand domestic and foreign markets, and increase the use of fluid milk and dairy products produced in the United States. Our responsibilities are to oversee the activities of this board.

Since last year, we have also strengthened our compliance activities to assure the integrity of our grading programs and have established an Agricultural Labor Affairs Office to assist in the development of agricultural labor policy.

1986 AMS BUDGET PROPOSAL

Presently, about 73 percent of AMS funding comes from user fees, and we are proposing to greatly increase this percentage in fiscal year 1986. However, this increase is entirely dependent upon passage of legislation.

Because the details of my 1986 budget request are contained in my formal statement, I will briefly summarize our budget requests. For fiscal year 1986, our current law request for our marketing services programs is $29.1 million. In addition, we will use approximately $9.1 million from section 32 to support our Commodity Procurement Program and administer our Marketing Agreements and Orders Program.

The overall appropriated funding level for fiscal year 1986, under current law, reflects a reduction of $2.2 million from the fiscal year 1985 level. It includes a $1.2 million reduction for marketing services and $1 million reduction for the Payments to States Program.

Our 1986 current law proposal includes the restoration of funding for cotton and tobacco market news reports, and egg products inspection. These programs were reduced in 1985 based on the assumption that user fee and less-than-continuous inspection legislation would be enacted.

Also proposed is the elimination of the Wholesale Market Development and the Payments to States Program. Management savings and the proposed 5-percent pay reduction are also included in our proposals.

We are proposing several legislative changes which would greatly increase the percentage of user fee funding within the agency. We are submitting legislation which would enable us to charge user fees for the full cost of market news and Federal Seed Act programs. We are also proposing a 3-year phase in of user fees for our standardization activities and user fee funding for the Federal costs associated with administering the Marketing Agreements and Orders Program.

We are resubmitting legislation for less-than-continuous inspection of non-eggbreaking egg processing operations. In conjunction with these legislative proposals, we are requesting a one-time increase of $1 million to support the transfer of activities from the marketing services appropriation to user fees.

This capitalization is needed to fund leave liability and workers' compensation for the market news, Federal Seed Act, and standardization activities.

To summarize our request, under current law our fiscal year 1986 Marketing Services request is $29.1 million, $1.2 million less than the fiscal year 1985 level. If proposed legislation is enacted, the Marketing Services appropriation will be further reduced by $17.3 million.

Under current law, the section 32 administrative request is $9.1 million, an amount which would be reduced by $6.2 million if proposed legislation were enacted. We are also proposing the elimination of the $1 million Payments to States Program.

This concludes my statement, Mr. Chairman. I would be happy at this time to respond to any questions that you or other members of the committee may have.

PREPARED STATEMENT

Senator COCHRAN. Thank you very much, Mr. Handley. We have your complete statement, and it will be placed in the record.

[The statement follows:]

STATEMENT OF JAMES C. HANDLEY

Mr. Chairman, I appreciate the opportunity to meet with you and members of the Committee to discuss the programs of the Agricultural Marketing Service (AMS) and specifically our budget request for fiscal year 1986. First, I would like to introduce my associates who are accompanying me: William T. Manley, Deputy Administrator for Program Operations; Eddie Kimbrell, Deputy Administrator for Commodity Programs; John T. Reeves, Deputy Administrator for Management; and Joseph A. Roeder, Director of our Financial Management Division.

Our fiscal year 1986 request reflects a continuation of our efforts to assist the Administration in reducing government spending, reducing the size of government and implementing user fees where appropriate. Under current law the total proposed budget for FY 1986 is $147.2 million. Of this total, our current law request for appropriations is $38.2 million. The remainder of our funding needs will be generated from our fee supported activities.

Our current law budget submission describes our funding needs based on existing legislation. However, we are submitting legislative proposals that, if enacted, will essentially maintain service levels in most of our programs but change their source of funding from appropriations to user fees. Rather than the $38.2 million appropriation request under current law, only $14.7 million in appropriations would be needed if all our legislative proposals were enacted.

Before addressing the specifics of our budget proposals I would like to briefly mention the purpose and activities of our agency. I'd also like to apprise you of reorganizations we've undergone during the past year, additional responsibilities we've assumed during this time period, and future projects which AMS intends to pursue.

AMS' PURPOSE

AMS programs promote the fair, orderly, and efficient distribution of products from the Nation's farms to consumers. This mission is carried out through the development and use of commodity standards in our voluntary grading services; the collection, analysis and dissemination of market news information; administration of fruit, vegetable and dairy marketing agreements and orders; assistance provided through our wholesale market development efforts; and various regulatory activities.

These services are provided at an annual cost of $149 million, with 73 percent ($109 million) of this amount derived from fees charged to the users of the services. The cost of our services represent only a small fraction of the retail cost of the commodities we inspect and grade. For example, in FY 1983, consumer spending on meat, fruit and vegetables, dairy products, poultry and eggs was $225 billion. The cost of AMS' services for these commodities contributed $74 million or 3/100 of one percent (.032%) to this cost.

In view of the large percentage of AMS programs that are voluntary and user supported, it is imperative that the agency provide efficient services at the lowest possible cost. We are constantly striving to achieve these goals. AMS program managers continually reevaluate program operations to improve service delivery or reduce service costs. Over the past several years we have consolidated several field offices and improved the management of our grading and certification procedures. We also regularly consult with several industry advisory committees to receive industry input and recommendations relating to current and proposed program activities. Lastly, based on recently enacted legislation, we have implemented an investment program for practically all of our user supported programs.

Since last October, when the expanded investment program was initiated, we have averaged nearly $165,000 a month in interest. This interest income will help offset increased program expenses and minimize future fee increases.

AMS' Activities

AMS conducts a wide variety of services to facilitate the marketing of agricultural commodities. Unbiased and current market information on numerous agricultural products is provided by our market news service. Commodities reported include dairy products, fruit and vegetables, livestock and meat, poultry, eggs, cotton and tobacco.

Our inspection, grading and standardization program covers development and maintenance of commodity standards, commodity grading and egg products inspection. Quality standards are established and are used to grade and inspect livestock and meat, poultry and eggs, dairy products, cotton, tobacco, and fruit and vegetables. The Egg Products Inspection Act requires continuous inspection in all egg breaking and drying plants in the United States and quarterly visits to egg handlers and hatcheries.

Within our market protection and promotion activity, we administer the Federal Seed Act, the Plant Variety Protection Act, and various research and promotion programs. We work in conjunction with the States to enforce truth in agricultural and vegetable seed labeling laws as specified in the Federal Seed Act. Under the Plant Variety Protection Act we review applications for new seed varieties and, if warranted, issue patent-like certificates of protection for these novel varieties.

We also provide oversight and direction to industry funded research and promotion programs for cotton, eggs and egg products, wheat, potatoes, dairy products. wool and mohair.

Our wholesale market development program provides technical assistance to State and local governments to improve agricultural marketing facilities and to reduce marketing costs through marketing research.

The Payments to States Program is a joint Federal-State effort aimed at improving the efficiency of the agricultural marketing system by supporting projects needed to help farmers market their products.

The Perishable Agricultural Commodities Act and the Produce Agency Act, both funded by annual license fees, are designed to protect producers, shippers, distributors and retailers from loss due to unfair and fraudulent practices in the marketing of perishable agricultural commodities and prevent the unwarranted destruction of farm products handled for others.

With Section 32 funds AMS directs the purchasing of particular agricultural commodities in order to stabilize market conditions and furnish food to meet the needs of the National School Lunch and other domestic feeding programs. Section

32 funds are also used for administering the marketing agreements and orders program and commodity contracting programs.

Recent Consolidations, Management Improvements, and New Program Responsibilities

The structure of our agency has changed somewhat in the past year. We have transferred certain program functions and certain administrative support functions to other agencies within the Department. Our responsibilities have broadened to include several new programs resulting from changes in legislation. Furthermore, we have strengthened our compliance activities to assure the integrity of our grading programs, and established an Agricultural Labor Affairs Office to assist in the development of agricultural labor policy.

In May 1984, the authority to examine and oversee the warehouse industry was transferred from AMS to the Agricultural Stabilization and Conservation Service.

In October 1984, we completed a consolidation of all non-policy "process oriented" administrative support activities for AMS into the Animal and Plant Health Inspection Service. The savings resulting from this consolidation have already been incorporated into the budget.

The Dairy and Tobacco Adjustment Act of 1983 placed additional responsibilities on AMS. In July 1984, AMS began inspection of all imported tobacco, except oriental and cigar-types. The information generated from this program will assist Congress in overseeing the No-Net-Cost-Tobacco Program, will enhance the effectiveness of Customs operations relating to tobacco, and will act as a source for adjusting price supports to make American tobacco more competitive on the world market.

The National Dairy Promotion and Research Board was also established by the Dairy and Tobacco Adjustment Act of 1983 as part of a comprehensive strategy to reduce milk supplies and increase consumption of milk and dairy products. The purpose of this Board is to establish a coordinated promotional effort designed to strengthen the dairy industry's position in the marketplace, to expand domestic and foreign markets, and increase the use for fluid milk and dairy products produced in the United States. Our responsibilities are to oversee the activities of this Board.

Compliance efforts within AMS were enhanced during FY 1984 to affirm the integrity and independence of our grading services as well as industry's compliance with Federal regulations. We are placing additional emphasis on reviewing alleged regulatory violations and evaluating potential areas of fraud, waste and abuse.

AMS plans to offer dynamic programs to facilitate the marketing of agricultural commodities. Over the years we have adapted our programs and research efforts to help improve the marketing system. It is our intent to continue improving program services and help pioneer the development of more efficient technologies.

Instrument classing of cotton is expected to increase from 33 percent of the fiscal year 1984 crop to 40 percent of the fiscal year 1985 crop. The High Volume Instrument system currently consists of instrument measurements for fiber length, strength, length uniformity, micronaire and color. An instrument for measuring trash content is under development and is expected to be added to the system in the future.

FY 1986 Appropriation Request (Current Law)

Our fiscal year 1986 request reflects our continued belief that government spending must be controlled and that government's involvement in State and local matters should be limited.

For fiscal year 1986 our current law request for our marketing services programs is $29.1 million. In addition, we will use approximately $9.1 million from Section 32 to support our commodity procurement program and administer our marketing agreements and orders program. The overall appropriated funding level for fiscal year 1986, under current law, reflects a reduction of $2.2 million from the fiscal year 1985 level.

The specifics of our current law proposals include:

-- An increase of $300 thousand for cotton and tobacco market news and $1,506 thousand for egg products inspection to restore funds for programs which were reduced in fiscal year 1985 based on the assumption that user fee and less than continuous inspection legislation would be enacted.

-- An increase of $243 thousand for annualization of the FY 1986 pay costs.

-- A decrease of $146 thousand which reflects a 10 percent reduction in administrative and management costs.

-- A decrease of $1,492 thousand for a 5 percent pay reduction.

-- A decrease of $1,582 thousand to eliminate the wholesale market development program, and

-- A decrease of $990 thousand to eliminate the Payments to States program.

FY 1986 Legislative Proposals

Included within the President's fiscal year 1986 budget are several legislative proposals of significance to AMS. These proposals are a continuation of our efforts to charge the cost of our services to those directly benefitting from the service.

During the past several years, we have scrutinized our activities and ascertained that the private sector, rather than the general public, should pay for an increased share of our services. As a result, we have gradually shifted the costs of our programs to the private sector beneficiaries as evidenced by the $27 million reduction in appropriations since fiscal year 1981. The proportion of user fee funded programs as a percentage of agency resources has increased from 54 to 73 percent during this time. We are especially proud that this funding transition has been carried out without adversely affecting the quality of our service. These changes have in fact produced a system which is more closely attuned to meeting the changing demands of the serviced industries. If our legislative proposals are enacted the percentage of user fee funding within the agency will increase from 73 to 90 percent.

Assuming passage of the various legislative proposals, our fiscal year 1986 request for marketing services would be $11.8 million, and $2.9 million for the Section 32 administrative expenses. Basically, passage of the proposals would leave our programs intact since a majority of the proposals would merely transfer the funding source for the activities from an appropriated basis to user fees.

The major legislative changes include:

-- A $14,156 thousand reduction in the market news service. This proposal would allow user fees to be charged to recover the entire cost of collecting, analyzing and disseminating market news information.

-- A decrease of $1,506 thousand for egg products inspection. Continuous in-plant inspection of non-egg breaking egg processing operations is not essential to assure the wholesomeness of the products nor is it an efficient utilization of personnel. Therefore, we are proposing legislation to eliminate this continuous inspection requirement. The bill would also reduce required shell egg surveillance visits from four times a year to one. The proposed reduction is dependent upon restoration of the program costs which were deleted from the fiscal year 1985 budget;

-- A decrease of $1,017 thousand for the first year of the three-year phase-in of user fees for standardization activities. The cost would be charged directly to users of the grading programs by increasing the grading fees;

-- A decrease of $980 thousand for enforcement of the Federal Seed Act. The proposed legislation would allow AMS to license all interstate shippers of seed sufficiently to recover program costs; and

-- A decrease of $6,193 thousand in Section 32. The proposed legislation would require industry to reimburse AMS for the expenses associated with administering the marketing agreements and orders program.

In conjunction with these legislative proposals, an increase of $1.0 million is requested to support one time start up costs associated with the transfer of activities from the marketing service's appropriation to user fees. The capitalization is needed to fund leave liability and workers' compensation for the market news, Federal Seed, and standardization activities.

Summary of Budget Proposals

To summarize our request, under current law our fiscal year 1986 marketing services request is $29.1 million, $1.2 million less than the fiscal year 1985 level. If proposed legislation is enacted, the marketing services appropriation will be further reduced by $17.3 million to $11.8 million.

Under current law the Section 32 request is $9.1 million, an amount which would be reduced by $6.2 million to $2.9 million if proposed legislation were enacted.

We are also proposing the elimination of the Payments to States program.

This concludes my statement, Mr. Chairman. I would be happy at this time to respond to any questions that you and other members of the Committee may have.

LOOKING AT OVERALL BUDGET

Senator COCHRAN. In looking at the overall budget that is being discussed this morning for these three services, I can't help but wonder if some of the requested changes might end up costing the Government more money in future years than the programs would cost if we appropriate higher levels of funding for this next fiscal year.

I am specifically referring to the brucellosis program, boll weevil eradication, fire ant control, the screwworm program, the grasshopper infestation problem, and gypsy moth. All of these that I have just mentioned are targeted for substantial reductions.

I haven't added them all up in my head, but just glancing down the list it looks like we are talking about $35 million. Is that about right, Mr. Hawkins?

Mr. HAWKINS. Yes, sir; that is correct.

IMPACT OF REDUCTIONS

Senator COCHRAN. What worries me is that if we do make those reductions now, is this going to make it likely that economic problems will result from infestation or greater damage to animal and plant resources and assets in the future than if we had spent this additional money?

In other words, is this a budget cut that is really a bad disinvestment? If we make these reductions, are we going to be requiring the Government to appropriate huge sums later on to deal with the problems that will be exacerbated?

Mr. HAWKINS. I don't believe so, Mr. Chairman. Take boll weevil, for instance. The reason for that $2 million reduction is that we are completing the eradication in the Carolinas, and it will only take about $200,000 to maintain the barrier. The California/Arizona program was not yet a fact when we prepared our 1986 budget, so we did not request funds in that area.

The Georgia, Florida, and Alabama programs are still awaiting action by the State legislatures and grower referenda, both of which are conditions for Federal cooperation.

In the other areas that you mentioned, in most of them, we do see a need for more input from both State and industry affected by these.

STATE AND INDUSTRY COOPERATION

I have said since I came to Washington—and the longer I am here the more I feel it is so—an important component of cooperative programs is producer sharing in the costs. Sharing in the financing of the program will get the attention of those affected, so that they will cooperate and try to eradicate, or contain, or whatever the case may be.

I cite a little homespun philosophy here. If I go to a horserace and I bet a dollar on the nose of Joe Blow to win in the second race, I am going to be out there on the rail. If I don't bet on the horse, I am going to be back in the stands drinking a beer with a friend of mine. I think that is an analogy that is appropriate in many of our programs.

It is in that sense that I think the budget that we have prepared will, in the long run, in most instances, get better cooperation and will probably eradicate the diseases more quickly.

Senator COCHRAN. I have other questions for each service, but I think at this point I will refrain from asking them. I will recognize other Senators who are here this morning and whose presence we deeply appreciate.

Senator Stennis.

SOUTHERN PINE BEETLE

Senator STENNIS. Mr. Chairman, I thank you. Gentlemen, I have been very much interested in some of this testimony. I am familiar with the problem. I don't know whether you handle the southern pine beetle. Do any of you do that?

Mr. HAWKINS. That is the Forest Service, sir.

Senator STENNIS. All right, all right. Anyway, I am delighted to be here, Mr. Chairman. I am going to have to leave shortly. You will have to excuse me. I had an appointment made weeks ago that I cannot break.

I think the chairman raised a very fine point. We are in a field here now where you can take out a few million, but I seriously doubt there would be any real savings in that. On the other hand, you would be imparing programs that cost in time and money. I know enough about these problems that you don't accomplish anything by that anyway.

You certainly have my backing. I will run that beetle down in the other department. Thank you.

Senator COCHRAN. Thank you, Senator. Thank you very much.

Senator Burdick.

ANIMAL WELFARE

Senator BURDICK. Mr. Chairman. According to the fiscal year 1986 budget submitted to the Congress, the administration is requesting zero funding to administer the Animal Welfare Act. Was the original budget request, submitted by the Agriculture Department to the Office of Management and Budget, changed in any way by OMB?

If zero funding is provided, what is the Department's intent with regard to administering the Animal Welfare Act?

Mr. HAWKINS. Mr. Senator, as you well recall when the authority was given to the Department of Agriculture to administer the Animal Welfare Act, it was really broken down into two parts. One was to promulgate the standards, regulations, and procedures through which to carry out the act. We feel strongly that that part has been accomplished.

We feel at this time a need for prioritizing, and we also believe that those who are affected should bear their fair share.

The other agencies that provide funding to research facilities have the same responsibility to this Congress and to the taxpaying public that my agency does. I believe strongly that they could carry out certain responsibilities under the act. They could withhold funds from any university or research facility if those facilities did not comply.

With respect to dog dealers and the research animal raisers, I feel that there are some 143 humane organizations and 50 States out there which are closer to the problem and that can probably do the job for a lot less than we in Washington can. That is the reason for the zero request.

ANIMAL WELFARE TRAINING

Senator BURDICK. Can you describe for the subcommittee the training that the animal inspectors receive? What kind of refresher courses are offered and at what intervals?

For example, are your inspectors required to be retrained every 2 or 3 years?

Mr. HAWKINS. Our inspectors are required to be trained. They receive on-the-job training and formal instruction in inspection techniques and procedures at least once a year.

ANIMAL WELFARE INSPECTIONS

Senator BURDICK. It is my understanding that the annual inspection goal of APHIS is four inspections per site. Studies indicate that it is more in the realm of two inspections. Why do you feel that APHIS is failing to meet that goal? How can APHIS best improve its site inspection record?

Mr. HAWKINS. At one time, we were looking for four inspections of each establishment annually. We have found with experience that it makes more sense to have more inspections at facilities with poor compliance and fewer at those with good records. Currently, we are averaging 2.6 inspections, and believe that is adequate. As the acceptance and knowledge of the requirements becomes more known through the research community, I feel that the number of inspections is not as strong a point as the amount of reciprocity that is given to those who break the law, and then publicizing their penalties. That is what we have attempted to do.

Senator BURDICK. Where did this rate come from, this annual rate of four inspections per site? Where did that come from.

Mr. HAWKINS. It was a goal that we established early in the program, but it is one that we have not continued because of the aforementioned reasons.

PROCESSING VIOLATIONS

Senator BURDICK. When violations are cited, can you explain the followup procedures? What percentage of cases filed with the Office of General Counsel result in prosecutions? What percentage of cases prosecuted result in permanent loss of license? What percentage have resulted in a temporary loss and for what period of time?

If you don't have all these answers, you can supply them, if you wish.

Mr. HAWKINS. We certainly will submit the total answer for the record.

[The information follows:]

Once we cite a violation, our area office gives the violator a certain period of time to correct the deficiency. If the problem is not corrected, they submit an alleged violation case to our compliance staff at headquarters. The compliance staff determines whether there is sufficient evidence to warrant legal action. If there is sufficient evidence, we either issue a letter of warning or forward the case for civil penalties or criminal prosecution to the USDA Office of General Counsel.

Approximately 35 percent of the cases we file with the Office of General Counsel result in criminal or civil prosecution. The remainder are settled before they go to trial or an administrative hearing.

We've permanently revoked one license. In about 21 percent of the cases, we temporarily suspend a license for 14 to 120 days. We can revoke a license for 1 year. At the end of this time, the offending party can reapply if he or she has taken corrective action.

GAO REPORT

Senator BURDICK. As you know, 2 years ago, this subcommittee directed GAO to conduct a study of the Department of Agriculture's Animal Welfare Program. It is my understanding that the Department is now in the process of reviewing the report.

Can you give me an indication when the Department will complete its final review and provide an official response to GAO?

I understand that there is a temporary report out, I think they call it. Do you have any general reaction to the temporary report that you would like to share with the committee?

Mr. HAWKINS. We have received the draft report from GAO and have reviewed it, as you mentioned. As I read it, sir, it was not overly critical of many things that we had been doing. We are reviewing it though, for a final action. We generally agree with the findings of the report.

Senator BURDICK. Of course, I haven't seen the report. I have been told that there is criticism in the report.

Mr. Hawkins. There is some, sir, yes.

Senator Burdick. That is all, Mr. Chairman.

VETERINARY SERVICES REALIGNMENT

Senator Cochran. Thank you, Senator. I had a note that Senator Paul Laxalt had contacted my office expressing some concern about the proposed closing or moving of your Western Region Veterinary Services Office from Reno to Denver.

I don't think he likes that. [Laughter.]

Is there anything that you can tell me that I can tell him that may make him happy?

Mr. Hawkins. I would certainly try, sir. I am aware of the Senator's concerns.

Every so often, we must reassess where our people are. In the complete evaluation of our needs—where our people are and where most of the disease is—and following a complete review of our regional offices, it was our best estimate that the Reno facility could be incorporated with the Denver facility, making a larger western region. Through this consolidation we will save $500,000 annually. That was not the only change that we made. We also made some changes in other regional boundaries—we moved the State of Kentucky into the northern region, and the State of Louisiana into the southeast region.

But we feel very strongly that we needed to do this, because the amount of disease varies from region to region and we must keep our people as busy as we can, wherever they are.

USER FEES

Senator Cochran. One thing, of course, that has become very popular now-a-days is user fees. I know each of you has mentioned user fees in one fashion or another this morning. I am concerned because there are some fees that seem to be taxes in disguise and may be ruled as such.

I am not sure that just by administrative or industry regulatory action such fees could be implemented. I'm not even sure that legislation that would originate in the Agriculture Committee would be an appropriate procedure for assessing user fees in some circumstances.

The Supreme Court, for instance, has ruled that user fees can be implemented for services that benefit the user, but they cannot be implemented as a revenue-raising device only, where there is no discernable benefit for the payer of the fee.

In this connection, I wonder about the imposition of a so-called user fee for inspection services for meat and poultry products where the manufacturer or packager pays the fee. It could be argued that it is the consumer who is being benefited there, I would think.

You are inspecting to certify the healthfulness, nutritional value, and absence of contamination. That is a benefit to the consumer. What is your reaction to that? Do you see any pitfalls like that ahead for you in the user fee concept area?

Dr. HOUSTON. Mr. Chairman, I will talk about meat and poultry inspection because I imagine that would be the greater amount affected by the user fee proposal. As you pointed out, we do not have that authority at this time. We are seeking to gain that authority by submitting a legislative proposal. That will be done shortly.

We believe there is a good rationale for establishing the use of user fees to recoup the cost of inspection. In fact, it was done 1 year, in 1947–48, when Congress decided that such a program was appropriate.

Meat and poultry inspection brings many benefits to the industry. Many meat and poultry plant operators only see the inspectors in their plants and only recognize some of those activities.

Consumer confidence in the meat and poultry supply is very important to the continued consumption of these products. Consumer confidence is hard to come by, but it is awfully easy to lose. We believe that the benefits that accrue to the industry on a very general basis in maintaining a high level of confidence among consumers are such that the industry should begin to share those costs.

At the present time, we also collect all of the costs associated with overtime inspection. This amounts to more than $30 million a year. So there are already programs in place in which these costs are recaptured from the industry, such as in the overtime area. Also, there has been a precedent set by the Congress in 1947.

Senator COCHRAN. There are some who say that the imposition of user fees in this food safety and inspection area might compromise the inspection program's integrity. Is that a likely consequence of charging user fees?

Dr. HOUSTON. I don't think that charge is valid. In fact, the system that we are proposing would require us to come before this committee each year to secure appropriations. Appropriations would be used to pay the inspectors through the same fiscal system that we now use. As we proceed through the year, the user fees would be imposed against the industry and paid into miscellaneous receipts of the Treasury to offset the cost of the appropriations that had been approved by this committee. I don't believe there is any validity to that charge.

Senator COCHRAN. Do you think States may move to make up the difference, providing some State-funded inspection services as a result of a user fee program?

Dr. HOUSTON. As you know, we provide up to 50 percent of the cost of the State programs now. If the user fee proposal is enacted, we would expect States to enact similar fees. The State of Florida has contacted us. We are aware that they are already considering a user fee system for that State through a licensing proposal.

GAO USER FEES REPORT

Senator COCHRAN. GAO did a study and made recommendations back in 1981 that user fees be initiated for the Agricultural Marketing Service activities. Was that report part of the thinking that has gone into your decision to implement user fees on such a broad scale? If not, what were the bases for your decision, Mr. Handley?

Mr. HANDLEY. We have been funding certain activities through user fees over a long period of time, Mr. Chairman. The 1981 General Accounting Office recommendations certainly influenced our decision to propose additional user fees. However, our decision to implement user fees for these programs stems from our belief that where the beneficiaries of our service can be identified, fees should be charged.

So we think it is in our prudent interest and in that of the taxpayers in general, to assess a fee accordingly.

APHIS USER FEES

Senator COCHRAN. What about the Animal and Plant Health Inspection Service? Is there a broadening of the use of user fees contemplated in your service, Mr. Hawkins?

Mr. HAWKINS. Yes, Mr. Chairman, there is. We have user fees in about eight different areas already. We are proposing legislation for four other areas: animal biologics, animal import inspection, animal export certification, and for issuing phytosanitary certificates for exported plants and plant products.

IMPORTED FIRE ANT

Senator COCHRAN. We have touched on boll weevil problems, and we generally went down the list of things that caught my attention as being targeted for substantial reductions in funding. The imported fire ant problem is not going away, although it looks like the Federal commitment is.

For instance, there was $5.8 million appropriated for this year and only $300,000 requested for next year. Have you given up here and just decided to let the ant take over the country?

Mr. HAWKINS. Mr. Chairman, two things are important here. No. 1, the insect, which is devastating, has about reached its ecological range.

Senator COCHRAN. How do you know that?

Mr. HAWKINS. That is the conclusion of USDA scientists who tell me that this ant can only live under certain climatic conditions, sir. That is the way I got my information.

Senator COCHRAN. OK. They surely have expanded.

Mr. HAWKINS. Yes, sir.

Senator COCHRAN. They continued to expand when they came in from South America. They are all over the Southwest. Now they are into the Southeast. I don't know how far they need to go to create a national crisis.

PERCEPTION OF AGRICULTURAL CRISES

It may be like the farm credit crisis though. You know, in the South we have been broke for about 6 years. A lot of farmers have gone out of business, over half of them depending on the Farmers Home Administration for financing. You have two Midwest banks that go broke and it makes the cover of Time Magazine and it becomes a national farm credit crisis. There was a book written by somebody one time. The title of it was, "I Have Been Down So Long, It Seems Like Up to Me."

Mr. **Hawkins.** Yes, sir.

Senator **Cochran.** You know, this thing had been serious in the State of Mississippi for a long time. Finally we began to get some national attention when it moved into some other States and it became a national problem.

FEDERAL COMMITMENT TO FIRE ANT CONTROL

Anyway, all of a sudden, the Federal commitment is disappearing on the fire ant problem. I mean, the commitment to do something about the problem, it seems to me, seems to be disappearing.

Mr. **Hawkins.** There is one other thing, if I may, Senator. That was just one side of the equation. The other is that the tools that we have today are not adequate for eradication. They will do some good in containment but not in a large scale eradication program where the Federal Government can be actively involved and carry out a good program.

For that reason, we feel that containment of the pest in particular areas, like parks, can be handled best at the local level.

ERADICATION TOOLS

Senator **Cochran.** I understand that for next year, APHIS plans to screen only one chemical compound that may provide an answer to the fire ant problem. But you have screened three in both of the past 2 years. I also understand that you plan to terminate regulatory efforts. What is the reasoning behind these decisions?

Mr. **Hawkins.** We rely on our sister agency, ARS, for much of the research on new products. As the list of options gets utilized, the ability to come up with new ideas is minimized.

RESEARCH

Senator **Cochran.** There is a proposal to eliminate the Cooperative State Research Service animal health and disease research, which is conducted in these areas under formula and special grants.

What effect is this going to have on your Animal Health Program and on the Nation if we approve the elimination of that funding?

Mr. **Hawkins.** This should not have a significant impact on our programs. The Agricultural Research Service budget request includes an increase in animal health research which will adequately support our programs.

Senator **Cochran.** The other day I was visiting with some veterinary medicine college administrators, and I ran into some concerns there that if we just left all of the research up to the State Agricultural Experiment Stations and the Competitive Grant Programs, that we wouldn't have much animal research done.

What is your reaction to that concern?

Mr. **Hawkins.** It is difficult to comment, sir. Each segment of research has its benefits, depending on the area which they are researching. We work very closely with our sister agencies in identifying areas that we are concerned about, and we have had good results in cooperation with them.

BOLL WEEVIL

Senator COCHRAN. The budget proposes to terminate funding for the Boll Weevil Eradication Program in North and South Carolina, except for followup surveillance and quarantine activities. I understand this was a 3-year project and the current year is the third year of the project. But I also understand that there will be a $650,000 funding shortfall for this fiscal year.

There is a request that had been transmitted to our committee for a possible supplemental appropriation to cover the shortfall. The administration has not requested a supplemental for this. Is there a shortfall? What are they talking about? Is this figure accurate? Do we need to come up with this money or not?

Mr. HAWKINS. I am going to call on my deputy, Mr. Ford.

Mr. FORD. Yes, Senator, there is a shortfall. Beginning approximately the 1st of July there will not be enough money with the Federal Government and with the industry organizations to fund the program through the rest of the fiscal year. The Federal share of that shortfall, based on a 70–30 split, is $650,000.

Senator COCHRAN. Why hasn't the administration submitted a request for a supplemental appropriation?

Mr. HAWKINS. Senator, we did not anticipate a shortfall.

Senator COCHRAN. Yes, I know. But supplementals can be submitted in an hour. I remember watching President Nixon sign one during a flood of the Mississippi River Valley, requesting appropriations for flood control, emergency assistance. If you need the money, you ought to tell us.

Mr. FORD. Some of the shortfall in the program, Mr. Chairman, is in the industry share of this program.

Senator COCHRAN. Some of this is money that is needed to be contributed by the industry group and not by the Federal Government. Is that what you are telling me?

Mr. FORD. Some of the money will eventually come from the industry.

Senator COCHRAN. Yes.

Mr. FORD. But their next collection period will be this May, and then it will go another year before they will have a collection period.

Senator COCHRAN. Will it be the intention of the Service to request a supplemental?

Mr. HAWKINS. I am sorry, sir. I didn't hear your question.

Senator COCHRAN. Will it be the intention of the Service to request a supplemental appropriation, under these circumstances?

Mr. HAWKINS. No, sir, we will not request a supplemental.

Senator COCHRAN. OK. What will happen? Do you know what will be the practical impact of that? If you don't request a supplemental and we don't appropriate some additional funding in this fiscal year, what will be the practical consequence of that for the eradication program and for the industry group?

Mr. **Hawkins**. It would be a delay in the final eradication of the boll weevil, sir.

Senator **Cochran**. Would it adversely affect the quarantine activities and other parts of the program to the extent that it would cause a waste of the appropriated funds for the 3-year program?

Would it undo and unravel everything that has been done before so that we end up not having a successful program? Whereas if the $650,000 is made available, then it wraps up one program and you have eradicated the boll weevil in those two States? That is what I want to know.

What is the practical consequence of not coming up with the money?

Mr. **Hawkins**. Eradication of the boll weevil would be delayed. The precise effect would depend in part on the ability of industry to come up with their share of the funds. It has been suggested to the industry by some of their own kind that they could possibly borrow that much money, sir, for that period of time. But, we would continue the quarantine, sir. We would not allow the quarantine to fall apart. That is our responsibility.

Senator **Cochran**. I am going to let other Senators ask some questions. I have a few more.

Senator Burdick.

MEAT AND POULTRY INSPECTION FEES

Senator **Burdick**. Dr. Houston, you mentioned placing a user tax in operation back in 1947, was it?

Dr. **Houston**. Yes, sir; that is what I am told. I wasn't part of the program then, but I understand it was put in for 1 year.

Senator **Burdick**. In your response to a question by the chairman, you distinguish the user fee from a tax. Was that decision or that act ever challenged?

Dr. **Houston**. In 1947?

Senator **Burdick**. Yes; in the courts?

Dr. **Houston**. I don't know, Senator Burdick. I know there was considerable concern expressed by the regulated industry at that time. Congress changed its decision the following year.

Senator **Burdick**. It probably changed before it got to court.

Dr. **Houston**. That may very well be. I will research that question more thoroughly and will submit an answer.

[The information follows:]

Court Decision on User Fees

On May 11, 1951, in *Combs* v. *United States* (98 F. Supp. 749), the U.S. Court for the District of Vermont issued the only decision that we are aware of concerning the user-fee system for meat inspection which was in effect throughout fiscal year 1948. B.F. Combs, operator of a small slaughter plant in East Berkshire, VT, challenged the legality of the user-fee system on several points, including the contention that the fee was in effect a tax. The Court found for the defendant (the U.S. Government) on all points. Specifically the Court held that the fee was not a tax because there was no evidence that the charges imposed were far beyond the amount needed to pay the cost of inspection.

Senator BURDICK. Most every committee that I go to now, I run into this user fee. I suppose sometime we are going to have to delineate the difference between a fee and a tax?

Dr. HOUSTON. Yes, sir, we will.

Senator BURDICK. Mr. Bumpers, the Senator from Arkansas would like to submit some written questions to you and have an answer.

Senator COCHRAN. They will be submitted. We hope you will be able to respond as soon as possible.

Senator BURDICK. I have some other questions I would like to submit for the record, too.

Senator COCHRAN. We do trust that they will be responded to in due course.

[CLERK'S NOTE.—All questions and answers appear at the conclusion of today's testimony.]

Senator BURDICK. Thank you.

Senator COCHRAN. Senator Sasser.

Senator SASSER. Thank you, Mr. Chairman. I apologize for not being here earlier for the statements. We had a meeting in the Defense Appropriations Subcommittee at 10 this morning. Really, Mr. Chairman, we need to do something about these appropriations subcommittees. I have two meetings this morning at 10 and two meetings this afternoon at 2. As resourceful as I am, I have never figured out how to be in two places at one time. But I am going to continue to work on it.

I apologize for not being here earlier. I do look forward, Mr. Chairman, to reading the statements of the witnesses in the record. I will have some questions to submit at a later date. Thank you.

EXPANSION OF BOLL WEEVIL PROGRAM

Senator COCHRAN. Thank you very much, Senator, for coming by. Let me ask one other question about this eradication program and then we will leave it.

Maybe the thing to do is to get together with some of your staff and some of the industry group, and let's get to the bottom of the problem. I know it is complicated. We may have a communications problem. It may not be as serious a problem as I am led to believe.

But, for instance, in the other States where we hope to be able to expand the eradication program, to Georgia, Alabama, and Florida, there has been a resistance to the effort to expand the program because of the cost sharing referenda that have not been approved by cotton growers in those States.

Could you tell me what the current status of the program is as related to the expansion proposals? Are there other States now, where we can expect additional requests for funding? The reason I bring this up is that we got to the floor last year with this bill and were trying to convince other Senators to vote for it. We had one or two Senators from States in the Southwest wanting to add money for funding of the boll weevil eradication program in their States.

I am asking this now so I can be prepared when we get the bill to the floor. Are there any other States where we may have to come up with cost-sharing funds because they will have become ripe for receipt of Federal funds? Do you expect that in the near future, or this year anytime?

Mr. HAWKINS. Yes, Senator. California, Arizona, and Mexico are ready to enter into a cooperative program. As I stated earlier, those States and Mexico did not have their programs in place when we put our budget together, so we have a 1-year program, and no money in our 1986 budget for a program in these States.

Senator COCHRAN. Have any of the other States had a referendum that would make them eligible for Federal funding?

Mr. HAWKINS. No; just those States, sir.

Senator COCHRAN. What States?

Mr. HAWKINS. California, Arizona, and working in conjunction with Mexico.

FUTURE OF BOLL WEEVIL PROGRAM

Senator COCHRAN. Is it the intent of the Service to continue the Boll Weevil Eradication Program, or abandon it?

Mr. HAWKINS. We have taken the position that when a referendum is passed by the growers, and enabling legislation is passed by the State legislatures on the 70/30 split, we would look with favor on that type of a program.

Senator COCHRAN. Why have those two States, California and Arizona, just been approved for a 1-year program?

Mr. HAWKINS. The reason was, sir, they did not have their enabling legislation and referendum passed by the time we drafted our 1986 budget. In other words, we could not ask for money, because they did not have all of their work done. The same is true, at this point in time, with Alabama and Georgia.

Senator COCHRAN. Will there be any request for supplemental appropriations for any of these States?

Mr. HAWKINS. None is planned at this time, sir.

BRUCELLOSIS

Senator COCHRAN. In requesting a phase-down in the Federal role in the Brucellosis Program, you are requesting that high incidence States be required to provide more funding. What impact will that requirement have on the affected States? What is this going to cost these States?

Mr. HAWKINS. We estimate approximately $5 million more with a $58 million Federal appropriation. As we phase down our funding level in the Brucellosis Program, we expect them to pick up their share.

Senator COCHRAN. Will this increased funding be required only of class C States—the high incidence States—or also of class B States?

Mr. HAWKINS. We anticipate class B and class A States to be pretty well taken care of by then, but some increased involvement will be needed from all States.

Senator COCHRAN. If funding continues for this program, how long do you think it will take to eradicate this brucellosis disease?

Mr. HAWKINS. Based on our fiscal 1986 budget proposal, in 5 years all States should achieve class A status or better. The Federal Government would then be responsible only for the disease surveillance and reporting and the enforcement of interstate regulations. Final eradication will depend on State and industry programs.

INDUSTRY STUDY

Senator COCHRAN. There was an industry group last year that told the committee that they had developed a 5-year eradication program. In our committee report, we directed APHIS to assist in evaluating and finalizing the plan. Was this done by APHIS? Is that the basis for your prediction that in 5 years we can eradicate brucellosis?

Mr. HAWKINS. I am aware of what the industry has been saying, yes, sir. We have provided this group with brucellosis information as needed. We anticipate evaluating the plan once they complete it.

EMERGENCY TRANSFERS

Senator COCHRAN. In fiscal year 1984, there was $65 million transferred from the Commodity Credit Corporation to emergency programs of APHIS. This fiscal year, 1985, it is estimated that $6.2 million will be transferred from CCC to APHIS. Under what circumstances are these transfers made?

Mr. HAWKINS. Under extreme emergency conditions, sir. The $65 million transfer was for the Avian Influenza Eradication Program. We felt the need to work expeditiously and get rid of it. I think we did a commendable job, if I can brag a little about my agency.

Senator COCHRAN. I hear that there is an expectation that there will be funds transferred next year and the figure $2.3 million has been brought to my attention. Why don't we just request an appropriation for that amount and tell us what it is for now, rather than wait and transfer the funds in 1986?

Mr. HAWKINS. I am going to let my budget officer, Mr. Ladd, take over.

Mr. LADD. Mr. Chairman, it will be $12 million for the Citrus Canker Program in 1985. We estimate that it will cost approximately $5.6 million in 1986 and $4.4 million in 1987. We have not included anything in the budget for 1987 because we have just developed those estimates in conjunction with the State of Florida.

Senator COCHRAN. What about 1986?

Mr. LADD. It would be $5.6 million for 1986.

Senator COCHRAN. There is no request for the $5.6 million in this budget then?

Mr. LADD. That is correct.

Senator COCHRAN. For the Citrus Canker Program.

Mr. LADD. That's correct.

ADDITIONAL CITRUS CANKER FUNDS

Senator COCHRAN. I remember that we put in $1 million at the request of Senators Chiles and Hawkins in last year's continuing resolution. I remember it coming up after the citrus canker problem came to the public's attention. These are funds that are in addition to the $1 million that we approved at their request?

Mr. LADD. I am unaware of any money being made available to the agency for citrus canker, Senator.

Senator COCHRAN. I am told they were research funds. They probably didn't go to you.

Mr. LADD. That's correct.

Senator COCHRAN. They went down to the University of Florida. It is being used there, I suppose. OK, thank you very much.

FSIS INTERNATIONAL PROGRAMS

I understand that the Food Safety and Inspection Service has begun reorganizing its international programs area. There are 10 new import field offices that have been set up. Can you tell us what this is about and what activities are occurring in the international program area?

Dr. HOUSTON. Mr. Chairman, it relates to that portion of the agency that reviews foreign inspection systems to be sure that they meet U.S. requirements, and which also conducts inspection programs at ports of entry for foreign meat and poultry products entering the United States.

That portion of our program is operated under the same umbrella of the organization that operates the domestic program. For a variety of reasons, we have chosen to take it out and to administer it separately with inspection and supervision dedicated solely to the import area.

That has come about as a result of an earlier GAO study and hearings conducted by the House Subcommittee on Livestock, Dairy, and Poultry, which showed that we needed to give more attention to that area to upgrade the quality of work that we are doing in import inspection.

You may recall that last year, this committee gave us additional funds for that area and part of it is going into this program that we are describing here.

We are not opening new offices. We are merely using existing facilities and placing supervisors in locations that already exist. So there is no establishment of new offices, per se.

ELIGIBILITY REQUIREMENTS

Senator COCHRAN. OK. I understand that you may be tightening up eligibility requirements for firms wanting to sell meat and poultry products to the Federal Government. Is this true? If it is, what has prompted this?

Dr. HOUSTON. This is a program that we operate cooperatively with the Agricultural Marketing Service. There are some plants that are placed under what we call the "Intensified Regulatory Enforcement Program."

There are not very many plants in the program, but there are a few. They are marginal operators, those who don't run the best operations. When they get into that category, we don't think they are fit to participate in the Department's food procurement programs. When that occurs, they are no longer permitted to bid on those purchases.

We do that in conjunction with my colleague to my left who administers the Agricultural Marketing Service.

Senator COCHRAN. Is it a question of danger in terms of contamination that would remove them from the eligiblity list?

The reason I ask that is: If it is not good enough for the Federal Government to buy, why is it good enough for the general public to buy?

Dr. HOUSTON. This came out of the Cattle King scandal over the last 2 years in which that company was demonstrated to be marginal in their operating practices. Because of that, we felt that when plants or companies got identified as such, we needed to get that kind of potential threat away from Government purchases. We think it is prudent on our part to eliminate them so that those kinds of situations don't occur, or at least minimize the opportunity for it.

MARKETING ORDERS

Senator COCHRAN. Given the present budget deficit concerns, has the Department of Agriculture given consideration to expanding the application of the Federal marketing order concept in lieu of the current support program for farmers?

We are in the process, in the Agriculture Committee, as you know, of trying to review the administration's farm bill proposals to get the cost of farm programs to the Government reduced. You are involved in administering marketing orders, and I was just wondering what your reaction to that might be.

Mr. HANDLEY. The bulk of that discussion is taking place in the area that covers the Agricultural Stabilization and Conservation Service where there are price support programs.

We have had a very successful record of utilizing marketing orders, but I think it has been more for those crops that have a limited geographic area.

PROMOTIONAL ACTIVITIES

Senator COCHRAN. There are some industry groups, commodity groups, that are now involved very actively in promotional activities. You know the Dairy Promotion Board has been created to promote the consumption of dairy products. There are other promotional activities going on.

To what extent is your service involved in either designing or overseeing or working with these groups in the promotion of these products?

Mr. HANDLEY. The Agricultural Marketing Service works with industry on promotion activities. The extent of these programs is determined by the authorizing legislation. The industry boards administer the promotion work themselves but we provide oversight and direction.

I think we have some real success stories with those kinds of promotional activities. The most recent one is the Dairy Promotional Program. We anticipate the Board will collect $197 million this year, of which $115 million is expected to remain with the 83 qualified State or regional programs. I think their program is going along nicely.

There is a report due to Congress July 1 evaluating the success of their promotional activities.

PAYMENT TO STATES

Senator COCHRAN. There is a portion of your statement relating to the payments to States, saying that you plan to eliminate that program. What is the impact of that? Have you done analyses to see what this is going to cost industry or States, if you do away with this shared funding?

Mr. HANDLEY. Yes, we have, sir. We have had this program in place since 1946. The prototypes and all the blueprints, so to speak, are now available to anyone wishing to continue this program at the State and local level.

It is our feeling that this is one of the areas the Federal Government can now move out of to reduce our budget expenditures.

SECTION 32

Senator COCHRAN. Back in 1984, we passed a new law, Public Law 98–623, that incorporated fish and fish products as an agricultural commodity in the Department of Agriculture. It made eligible some activities relating to the production and marketing of these products. It made them eligible for Commodity Credit Corporation loans, agricultural trade development, and assistance and food for overseas exports.

What steps has the Department of Agriculture taken or planned in order to implement this new legislative authority for fisheries to assist in promoting this industry?

Mr. HANDLEY. Speaking for the Agricultural Marketing Service, our only involvement would be purchases of surplus fish for the domestic feeding programs. We have purchased approximately $2.5 million of fish products this year.

Senator COCHRAN. How is that working? Has that proven to be a successful activity? Any complaints? Do they like catfish?

Mr. HANDLEY. Well, we haven't purchased any catfish this year.

Senator COCHRAN. You ought to try that.

Mr. HANDLEY. The catfish industry is doing so well in marketing their product that they do not have a surplus at this time. We did purchase some tuna as I recall.

Senator COCHRAN. Keep it in mind.

Mr. HANDLEY. I am sure we will.

Senator BURDICK. What is wrong with pike?

Senator COCHRAN. Senator Burdick wants to know what is wrong with pike?

Mr. HANDLEY. There is nothing wrong with pike. But they, too, are not in surplus at this time.

Senator COCHRAN. Senator Harkin.

Senator HARKIN. I am sorry, Senator. I really don't have any questions at this time. Thank you.

SUBMITTED QUESTIONS

Senator COCHRAN. I have other questions which I will submit in writing to each of the services. We will try to get together to talk about the Boll Weevil Eradication Program so we can find out where we are on that, what the plans are, and what the projected needs are for funding. I don't think we got that ironed out today.

I really appreciate your being here. Bob Sherman, our budget officer, is here. We never ask him anything. [Laughter.] One of these days I am going to have a long list of questions for Bob Sherman and see what happens. He probably has answers right there in his pocket.

Ms. Darling, we appreciate your being here in your role as Deputy Assistant Secretary. Thank you all for your cooperation with the committee.

Ms. DARLING. Thank you, Senator.

[The following questions were not asked at the hearing but were submitted for response for the record:]

ANIMAL AND PLANT HEALTH INSPECTION SERVICE

QUESTIONS SUBMITTED BY SENATOR COCHRAN

ADMINISTRATIVE SUPPORT

Question: APHIS performs administrative support for the Agricultural Cooperative Service, the Agricultural Marketing Service, the Federal Grain Inspection Service, the Office of Transportation, and the Packers and Stockyards Administration. What does this administrative support entail?

Answer: I would like to provide a list of the management services that APHIS performs for these Agencies:

Agricultural Marketing Service

All administrative services including procurement, contracting, property, space, records, forms, issuances, mail, printing and distribution, communications, and headquarters services.

Personnel operations including classification, employment, wages and benefits.

Personnel policy functions are retained in AMS.

Federal Grain Inspection Service and Packers and Stockyards Administration

All administrative services including procurement, contracting, property, space, records, forms, issuances, mail, printing and distribution, communications, and headquarters services.

All personnel services including classification, employment, wages and benefits, labor relations*, employee relations, and performance management and evaluation.

Policy support for cooperative and interagency agreements.

Agricultural Cooperative Service and Office of Transportation

All administrative services including procurement, contracting, property, space, records, forms, issuances, mail, printing and distribution, communications, and headquarters services.

All personnel services including classification, employment, wages and benefits, labor relations, employee relations, and performance management and evaluation.

Financial management services including budget development, presentation, execution, fiscal, accounting system, status of funds, and agreements.

* There are no labor relations activities in the Packers and Stockyards Administration

Question: APHIS also performs mail processing and delivery for the Agricultural Research Service, the Human Nutrition Information Service, and the Office of the Inspector General. Why does APHIS perform this service?

Answer: APHIS maintains a mailroom in its Hyattsville, Maryland, location and provides mail processing services for incoming and outgoing mail to the Agricultural Research Service, Human Nutrition Information Service, Office of Inspector General, and Food Safety and Inspection Service. These agencies are located in the same building and do not maintain separate mailrooms. They are charged for this service under reimbursable agreements with APHIS.

PERSONNEL

Question: The fiscal year 1985 staff-year ceiling is 213 fewer than fiscal year 1984, and the fiscal year 1986 ceiling is 100 fewer than fiscal year 1985. In what programs did these cuts take place in fiscal year 1985? In what programs will these cuts be affected in fiscal year 1986?

Answer: Over half of the reduction of 213 staff years between FY 1984 and FY 1985 is due to the termination of temporary employees who worked on the avian influenza eradication program. The remaining reduction is spread among several programs including screwworm, grasshopper, gypsy moth, imported fire ant, Medfly, and witchweed. The staff year reduction of 100 in FY 1986 is in programs with proposed funding reductions and includes animal welfare, imported fire ant, noxious weeds, pink bollworm, and witchweed. The staff year reductions in these programs are partially offset in programs with proposed funding increases.

Question: Although there will be a reduction of 90 field staff-years in fiscal year 1986, there is a proposed cut of $9.5 million in field personnel compensation. That's an average of $105,000 per field employee. Please explain why there is such a large cut in personnel compensation in relation to the cut in staffing.

Answer: The cut of $9.5 million in field personnel compensation is due to the 5% pay cut for all Federal employees - $5.4 million, decrease in 90 staff years - $2.3 million, and reduction in average grade - $1.8 million.

LANDS AND STRUCTURES

Question: Why are you requesting a 77% increase (from $3.4 million to $5.9 million) for land and structures?

Answer: This increase is for major construction at the Waimanalo Experiment Station, Hawaii, to build a fruit fly rearing facility, partially offset by a decrease in recurring minor construction and alterations. I am submitting a table showing the construction obligation changes.

Obligations for Construction
(dollars in thousands)

	FY 1985	Change	FY 1986
Major construction:			
Hawaiian fruit fly facility	--	+$3,577	$ 3,577
Biocontrol facility	$18	- 18	--
Mexfly rearing facility	891	- 891	--
Subtotal	909	+2,668	3,577
Minor construction, alterations and repairs	2,449	- 88	2,361
Total, construction	$3,358	+$2,580	$5,938

Our estimated FY 1986 obligations for lands and structures therefore includes approximately $3.6 million in carryover funding for the Hawiian Fruit Fly Facility which was previously authorized by Congress and $2.3 million in new obligational authority for minor construction, alterations, and repairs to be performed in APHIS facilities throughout the country. While much of the Fiscal Year 1986 estimated obligations result from carryover balances of previous years, the Fiscal Year 1986 appropriation request of $2,361,000 is the same as the FY 1985 Congressional allowance.

Question: Why are you also requesting additional language in the Buildings and Facilities account to allow you to purchase land, even though there is no request for increased funds in that account?

Answer: The Agency is merely requesting the authority to purchase land. In the past we have had to enter long-term leases for land at proposed building sites. This has limited the flexibility of the agency to achieve cost savings by sometimes making a comparatively low expenditure for land acquisition rather than costly recurring payments. This proposal will allow APHIS to obtain building sites either by purchase or lease whichever is appropriate for the individual facility. This agency will notify Congress when land purchases are deemed proper with adequate justification material.

Question: Are there current plans to buy land? If so, where, and for what purpose?

Answer: There are no present plans to purchase land. This stand-by authority is needed in order that the Agency can acquire building sites at the least cost.

CONTINGENCY FUND

Question: For fiscal year 1986, the budget proposes to increase the contingency fund for emergencies from $1 million to $3 million. Has the contingency fund been used so far during this fiscal year?

Answer: We have not used any contingency funds so far in this fiscal year. We have earmarked $500,000 of the contingency fund for grasshopper control.

Question: Why was the $3 million figure chosen? Why not more, or less?

Answer: Providing $3 million for the contingency fund will allow us the flexibility to deal with more than one unforeseen need during a year. Experience has shown that one pest or disease situation could easily require the full $1 million contingency fund. However, we believe it is likely that pests or diseases requiring more than $3 million to eradicate would either qualify as an emergency or be more appropriate for consideration in the regular congressional review process.

VEHICLE PURCHASE

Question: Is it true that APHIS has rather broad authority on its use of funds for vehicle purchases?

Answer: While the Agency does obligate appropriated funds for motor vehicles, it can only legally replace 25 percent of its current fleet in a particular fiscal year, and all vehicles scheduled for replacement must either be over 6 years old or have travelled 60,000 miles or more.

Question: Please indicate for the record how many vehicles were purchased in fiscal years 1981, 1982, 1983, 1984 and estimated for 1985 and indicate the program accounts from which the funds were diverted.

Answer: Funds are taken from the various Agency projects in the same proportion that it is estimated the vehicles would be used. These vehicles support most of the Agency programs. Passenger motor vehicles were purchased as follows:

Fiscal Year	Number of Vehicles Purchased
1981	20
1982	166
1983	147
1984	145
1985 (estimated)	170

FUNDING ADJUSTMENTS

Question: What funding adjustments did you make last year in order to meet the unforeseen needs you referred to in your new statement? Please be specific.

Answer: In the more serious cases of avian influenza and citrus canker, we transferred funds from the Commodity Credit Corporation. For the smaller outbreaks such as Mexican fruit fly in California, Mediterranean fruit fly in Florida, and honey bee tracheal mite we were able to cover costs by reprogramming within APHIS and with substantial State and industry cooperation. In the Mexican fruit fly program the State of California paid for over 90 percent of the program costs. The Medfly costs were shared on a 50-50 basis with the State of Florida. The industry paid for replacement bees in the honey bee tracheal mite program. We were able to cover the Federal costs for these efforts through the use of personnel from our other programs and delays in filling vacancies and making certain purchases.

EXPORT INSPECTION

Question: Why has the number of cattle inspected for exports been reduced by half (400,000 to 200,000)?

Answer: The 400,000 figure was an estimate. The actual figure, 320,871, has just become available. The 200,000 figure is based on the assumption that future exports may drop because of the strong value of the dollar and the devaluation of Mexican currency.

VETERINARY BIOLOGICS

Question: Are your activities in veterinary biologicals related in any way to the activites of the Food and Drug Administration which determine the safety and effectiveness of drugs?

Answer: APHIS activities in veterinary biologics are similar to but distinct from those of the Food and Drug Administration. The Virus-Serum-Toxin Act gives the U.S. Department of Agriculture the authority to regulate animal biologics that are imported or shipped in interstate commerce and license animal biologics manufacturing establishments. The Federal Food, Drug, and Cosmetic Act enforced by the Food and Drug Administration states that nothing contained in the Act shall in any way affect, modify, repeal or supercede the Virus-Serum-Toxin Act. APHIS and FDA have a Memorandum of Understanding that clarifies the responsibilities for regulating products as biologicals under the Virus-Serum-Toxin Act or as drugs under the Federal Food, Drug, and Cosmetic Act.

ANIMAL WELFARE

Question: In the past few years, funds for the enforcement of the Animal Welfare Act were not allocated on a quarterly basis, but were, for the most part, allocated only in the last quarter. Why was this done?

Answer: In FY 1983, we did not allocate the animal welfare appropriation on a quarterly basis. At the beginning of FY 1983, APHIS was faced with emergency funding needs including Medfly in California and African swine fever in Haiti but had no available funds for these projects. As a result, we deferred $6.2 million of brucellosis funds, postponed hiring personnel and purchasing equipment, and did not allocate $1 million of animal welfare funds. Later in the year, we received Commodity Credit Corporation funds to cover the Medfly and African swine fever emergencies. We released $350,000 of the animal welfare funds in February and the remaining $650,000 in the fourth quarter.

In FY 1984, we fully allocated animal welfare funds at the beginning of the year, but had to delay much of the program work until the fourth quarter because the avian influenza emergency required many program personnel to work on that effort until June and July.

Question: Are funds being allocated on a quarterly basis this year?

Answer: Yes, APHIS has allocated the animal welfare funds on a quarterly basis this year.

Question: It is the Committee's understanding that in prior years (1983-1984), funding for the Animal Welfare program was not obligated until late in the fiscal year. Were the entire appropriations for 1983 and 1984 obligated or were some of the funds used for other purposes? Please explain.

Answer: In FY 1983 and FY 1984, we obligated more than 96% of appropriated funds for the animal welfare program. No funds were reprogrammed from animal welfare to fund other programs.

Question: What is the situation for FY 1985?

Answer: We plan to obligate all appropriated animal welfare funds in FY 1985.

Question: How are the funds distributed to the States, i.e., formula? What are the criteria?

Answer: We allocate the funds to individual States based on the work plans submitted by each Area Veterinarian in Charge. The Area Veterinarian in Charge uses our national guidelines to determine the necessary number of inspections. In the past, our guidelines have placed more emphasis on the inspection of animal dealers than on research facilities. However, beginning with fiscal year 1984, and to a greater extent in fiscal year 1985, we have emphasized the inspection of research facilities. California, New York, and eight other States with a high number of research facilities have been given emphasis in fiscal year 1985 and we have shifted funding accordingly.

Question: Why will the number of violations processed increase from 220 to 250 from fiscal year 1985 to fiscal year 1986 if all enforcement and cooperative efforts with other government agencies are terminated?

Answer: The number of animal welfare violations was misprinted. It should read that no animal welfare violations will be processed during 1986.

Question: It is the Subcommittee's understanding that copies of a draft report on the animal welfare program were submitted to the Department for review and comment in February. Has the Department completed its review and submitted its comments to the General Accounting Office on this report?

Answer: Yes, we have submitted our response to the General Accounting Office.

Question: Can you share with us USDA's reaction to the draft GAO report?

Answer: We generally agree with the findings of the report. We were aware of some of the problems prior to the review. We believe that the source of many of the problems and their eventual resolutions are directly related to the program's organizational structure and lines of communication.

We reorganized the animal welfare program in early fiscal year 1983, just prior to the review. We wanted to improve the lines of communication between program policymaking personnel and the Regional Directors, Area Veterinarians in Charge, and field inspection personnel. As a result of that reorganization, we are confident that many of the problems that existed at the time of the review have been or are being resolved.

Question: What type of training do your inspectors receive?

Answer: Our inspectors receive on-the-job training and formal instruction in inspection techniques and procedures. New inspectors receive on-the-job training from the Regional Animal Care Specialist and Area Animal Care Coordinators. During Fiscal Years 1980 through 1983, formal instruction consisted of work conferences at the regional level.

In FY 1984, we reestablished formal training courses at the national level and held one course each for Animal Care Coordinators and Veterinarians who inspect research facilities. In FY 1985, we've held 2 of the planned 3 courses for veterinarians who inspect research facilities and will conduct a course for inspectors of marine mammal facilities. We use selected individuals from regulated industries, humane groups, and other Federal agencies to assist with the training.

Question: Have all of your inspectors received formal training or is it primarily on-the-job training?

Answer: No, all our inspectors have not received formal training.

Question: Do you feel the training is adequate?

Answer: Yes, with the reestablishment of formal training at the national level, supplemented by on-the-job training and work conferences at area and regional levels, we now believe that our training is adequate.

Question: Do you have written guidance for your inspectors to fall on?

Answer: Yes, we provide inspectors with written guidelines consisting of regulations, standards, bulletins, numbered memorandums, and other correspondence.

Question: Is it adequate?

Answer: We believe that we provide our inspectors with adequate written guidance. Also, we plan to issue a field manual to our inspectors later this year which will consolidate all of the guidelines and other pertinent information relative to the interpretation and enforcement of the Animal Welfare Act.

Question: Is it not true that your program planning documents cite a desired level of four inspections per year?

Answer: Early in the program, we determined that the proper frequency of inspections was four times per year. However, several years ago, as a result of our own assessment and comments by the regulated industries, we changed our policy. We decided that it was an ineffective and inefficient use of time and funds to routinely inspect four times a year those facilities which had established a good compliance record. We, therefore, established a national average inspection rate of two and one-half times per year with the understanding that each inspector would evaluate the facilities for which he/she was responsible and determine the appropriate inspection rate based on the facility's compliance record.

Question: How often do your inspectors visit each site?

Answer: We plan to inspect all facilities at least once a year. The total number of inspections a facility receives is based upon its compliance record. Facilities which are not in compliance with the Animal Welfare Act are visited more frequently. APHIS' policy requires that a date be established for the correction of all deficiences found during an inspection. Within 30 days following the deadline for correction of any major deficiencies, the inspector must return to ensure that the facility is in compliance with the Animal Welfare Act. Also, APHIS makes inspections of facilities in response to complaints from the general public and humane organizations.

Question: How do your inspectors determine which sites to visit?

Answer: Our inspectors are told that each facility must have a minimum of one inspection annually. Facilities with poor records, generally referred to as problem or marginal facilities, are inspected, as needed, based on the inspector's judgment of what is required to obtain compliance. The majority of the inspections are directed at the problem and marginal facilities.

Question: Are there sites that have never been inspected? Why?

Answer: No, we inspect all sites at least once annually. In the past years, however, we missed some sites due to errors in our manual tracking system of inspections. We are computerizing our tracking system to prevent these errors.

Question: How much did USDA collect in fees in fiscal years 1983 and 1984?

Answer: We collected $143,252 in license fees in FY 1983 and $143,086 in FY 1984.

Question: What is this money used for?

Answer: As stipulated in Section 23 of the Animal Welfare Act, all these funds are deposited into the Treasury as miscellaneous receipts and are, therefore, not available to the Department for program operations.

Question: Could more of the cost of the program be borne by the licensees?

Answer: Yes, because the license fees have not been increased for fifteen years. These license fees were set when regulations were drafted under the 1970 amendments to the Animal Welfare Act. We are now revising program regulations to increase all the license fees in order to compensate for inflation and increased costs since 1970.

Question: As you may know, there is a large constituency for enforcement of the Animal Welfare Act. It is an area that generates a great deal of mail to Members of Congress. The Administration has maintained that State, industry and humane groups should assume responsibility for enforcement. Do these groups have sufficient authority to enforce the provisions of this Act?

Answer: It is true that only United States Department of Agriculture employees can enforce the provisions of the Animal Welfare Act. However, every State has some type of general animal anti-cruelty law and many States are moving to strengthen their laws. In FY 1984, 14 States considered increasing the criminal penalty and fines for offenders and granting additional police powers to humane societies. We believe more States should take such actions.

Question: Why do you not feel that it is the Federal government's role to enforce the Act?

Answer: APHIS has publicly established standards for the humane care of animals and we believe that States, industry, and humane groups should now take responsibility for enforcement. We believe that we have accomplished that objective, and that it is now appropriate to focus our resources on the protection of American agriculture from pests and diseases. There are over 140 humane groups and 50 State Departments of Agriculture that are close to the problem and can do an effective job on animal care.

Question: Should the government not at least enforce the Act in interstate commerce?

Answer: No, we believe that the Agency should get entirely out of the program.

Question: The General Accounting Office will soon publish a report on the Department's enforcement of the Animal Welfare Act, a draft of which has been provided to the Department for comment. This report does not give the agency high marks for its enforcement practices. Two of the problems were a lack of funding and the very low priority placed on inspections. Assuming Congress decides to sufficiently fund this program in order for APHIS to adequately enforce the Animal Welfare Act, how much would a proper enforcement program cost?

Answer: APHIS could adequately enforce the Animal Welfare Act at the present level of funding. Many of the concerns expressed in GAO's report were related to the organizational structure and lines of communication between policymakers and field personnel which existed at the time of the GAO review. Just prior to the review, in early fiscal year 1983, we reorganized the program to address those problems. We believe that many of the problems which existed at the time of the review have been or are being resolved.

MISCELLANEOUS

Question: What will account for the decrease in "grants, contributions, and subsidies" of $5.8 million?

Answer: The decrease of $5.8 million in grants, contributions, and subsidies is due to decreased funding needs in the screwworm eradication program in Mexico. We have achieved our goal of eradicating the pest down to longitude 93° at the Isthmus of Tehuantepec and have established a barrier zone in that area to prevent reinfestation of freed areas to the north and west. Funding can be reduced to a level sufficient to maintain the biological barrier.

Question: The budget requests authority for one additional aircraft, if needed, for the purpose of following the screwworm release plane in Mexico. Why can't APHIS personnel fly in the plane which is releasing the flies.

Answer: We've found that it's not economical to have program personnel serve as observers onboard the dispersing aircraft. We use small contract aircraft with their extra seats and interiors stripped out. This allows us to load the maximum number of screwworm fly drop boxes on the aircraft. The addition of a seat for an observer would reduce the fly-box load by approximately 20 percent. Also, one observer in a "chase" plane is able to observe the activities of several dispersal aircraft.

Question: What insurance claims and indemnities are paid by APHIS?

Answer: APHIS pays indemnities to owners of animals condemned and slaughtered due to infection or exposure to diseases such as brucellosis, tuberculosis, scrapie, avian influenza, and exotic Newcastle disease. APHIS has also paid indemnities to citrus growers in Florida for loss of nursery stock destroyed because of citrus canker.

Question: Why is there a decrease in fiscal year 1986 of $3.1 million in this classification?

Answer: The $3.1 million indemnity reduction in FY 1986 is in brucellosis and is due to the continued decrease in the incidence of this disease.

BRUCELLOSIS

Question: What is the current status of the brucellosis eradication program?

Answer: The brucellosis eradication program continued to make progress in the first quarter of FY 1985. The market cattle identification reactor rate is now 0.266, down 0.009 from the first quarter of FY 1984. Thus far in FY 1985, two States have improved their brucellosis classification. Minnesota improved from Class A to Free Status and Kansas went from Class B to A Status.

Question: Please provide for the record a list of how each State is classified.

Answer: We will be pleased to provide a list of State classifications for the record.

BRUCELLOSIS STATE CLASSIFICATIONS
AS OF MARCH 1985

Free Status:	Alaska Connecticut Delaware Hawaii Maine Maryland Massachussetts	Michigan Minnesota New Hampshire New York North Carolina North Dakota Pennsylvania	Rhode Island South Carolina Utah Vermont Virgin Islands Wisconsin
Free & A Status:		Montana Wyoming	
A Status:	Arizona California Colorado Idaho Illinois Indiana	Iowa Kansas Nebraska New Jersey New Mexico Ohio Oregon	Puerto Rico South Dakota Virginia Washington West Virginia
B Status:	Alabama Georgia	Kentucky Missouri Nevada	Oklahoma Tennessee
B & C Status:		Florida Texas	
C Status:	Arkansas	Mississippi	Louisana

Question: If Congress continues to fund the brucellosis program at the same level as provided for fiscal year 1985, how many years will the eradication program last?

Answer: Increased State and industry cooperation are essential to the eradication of brucellosis. Increased levels of funding will not ensure quicker eradication without greater participation by States and industry.

USER FEES

Question: You are proposing legislation which would charge user fees for a number of APHIS programs: part of the cost of agricultural quarantine inspection and certification; portions of the import inspection program for preventing diseases and pests from coming into the U.S.; and the entire cost of the prevention of production and interstate distribution of worthless, contaminated, dangerous, or harmful veterinary biologics.

The Supreme Court has ruled that user fees can be implemented for services that benefit the user, but cannot be implemented as a tax. If this view is taken, I can see how you could charge an identifiable beneficiary for the specific service of certifying the health of an animal or plant being imported. However, it seems to me that if you charge manufacturers of biological products for interstate inspection, it could be thought of as a tax of this industry. Do you agree with this view?

Answer: We do not consider our proposed user fees for veterinary biologics a tax on this industry. Manufacturers benefit from the program through improved quality control and increased consumer confidence in their products.

Question: What is the reasoning behind the request for user fees for these particular services?

Answer: We have proposed user fees for these activities because they provide a way to maintain the services and reduce Federal spending by having the beneficiaries of these programs pay the cost.

SCREWWORM

Question: Screwworm has been eradicated to the Isthmus of Tehuantepec in Mexico, where a biological barrier has been established. Last year, Senator Boren offered an amendment on the floor to increase funds for moving the biological barrier farther southward. The '86 request is based on maintaining the barrier where it is. In last year's Committee report on the Agriculture Appropriations bill, APHIS was requested to study the feasibility of moving the screwworm barrier as far south as Guatemala's border with Honduras and El Salvador. Our Committee also concurred in the House Appropriations Committee that a comprehensive study be conducted to asssess the feasibility of moving the barrier farther southward. It was understood that that study was to include the feasibility of moving the barrier as far as Panama. Could you please summarize the results of these studies?

Answer: We will be pleased to provide a summary for the record.

SUMMARY

- Screwworms are an important pest of livestock throughout Central America and Panama. They have been eradicated from the U.S. and Mexico north of the Isthmus of Tehuantepec.

- The House and Senate Appropriations Committees directed APHIS to conduct a comprehensive study of extending screwworm eradication from southern Mexico to the Panama-Colombia border.

- Previous feasibility studies involving USDA scientists show that screwworm eradication in Central America and Panama is technically feasible.

- Eradication is operationally feasible and is supported by producers and governments in the region. Discussion with U.S. Military personnel assigned to U.S. embassies indicated that problems concerning the personal safety of program employees could be overcome.

- Eradicating screwworms from the remainder of Mexico, Central America, and Panama would require 4-5 years at about $50 million annually, or up to $115 million above the cost of maintaining a protective sterile-fly barrier in southern Mexico for the same period of time. In addition to the eradication costs, $10 million would be required for construction of a sterile-fly producing plant at the Isthmus of Panama.

- Eradication of screwworms from the region is cost-beneficial. Based on economic losses caused by the insect and considering cost savings in barrier operations, a program to extend eradication to Central America and Panama has a benefit/cost ratio of 2.9:1 and produces net benefits valued at $131.2 million.

- The program could be extended into Central America as soon as eradication is complete north and west of the 93rd meridian in southern Mexico, funding and authority are received, and agreements are signed with each participating country.

- If political unrest or other conditions prohibit a continuous program of screwworm eradication through Central America and Panama, the insect could be eradicated to the Guatemala-Honduras border, and a sterile-fly barrier established at that location.

- If such a program is undertaken, the Mexico-U.S. Screwworm Eradication Commission could supervise the program, host countries could provide logistical support and the Inter-American Institute for Cooperation on Agriculture could operate the sterile-fly barrier at the Colombia/Panama border.

COMMODITY CREDIT CORPORATION TRANSFERS

Question: Under what circumstances may transfers be made from CCC?

Answer: The Secretary of Agriculture has the authority under Public Law 97-46 to declare an emergency and transfer CCC funds to APHIS for the control or eradication of both plant pests and contagious or infectious animal and poultry diseases. Generally, four conditions must be met before APHIS recommends an emergency declaration. The outbreak must pose an economic threat to industry or consumers; control or eradication is feasible and cost effective; current program activities are inadequate and an emergency declaration has the support of affected States or industry.

Question: What activities have these funds supported?

Answer: In FY 1984, $66,700,000 was transferred from the Commodity Credit Corporation for APHIS emergency programs. Of this, $63,433,215 was used for the eradication of avian influenza in Pennsylvania and Virginia; $549,248 was used for the citrus canker program in Florida; and $694,649 was for grasshopper in Western States. A balance of $2,022,888 was carried over into FY 1985 and is being used to complete the avian influenza surveillance activities. In addition, we will transfer $12,000,000 in FY 1985 for the citrus canker program in Florida.

Question: Why is $2.3 million expected to be transferred in fiscal year 1986?

Answer: This was our preliminary estimate of the funds needed for citrus canker eradication in FY 1986. We now estimate that the FY 1986 cost will be $5.6 million.

MEDFLY

Question: Occasionally, I read about isolated discoveries of the Mediterranean fruit fly. The budget requests a $2 million increase for fiscal year 1986. Have there been any outbreaks in the past year which got out of control?

Answer: We are glad to say that no Medfly outbreaks got out of control during the past year. We had Medfly finds in Beverly Hills and Santa Barbara, California, and Miami, Florida. The finds in California were isolated and did not require extensive control activities. The Miami outbreak was slightly larger, requiring some pesticide application and strong regulatory measures imposed by the State and APHIS. This outbreak was quickly eradicated.

Question: What is the current status of the Medfly eradication effort in Mexico?

Answer: We have intensified our efforts along the Mexico/Guatemala border. Due to coffee prices and civil unrest in Guatemala, populations of Medflies have built up on the border. We will be spraying 200,000 acres on the Mexico/Guatemala border to reduce Medfly populations. Once we reduce the populations, we can begin to release sterile flies. With release of the sterile flies we hope to once again eradicate the Medfly from Mexico and further reduce Medflies in Guatemala.

Question: How will the additional $2 million be used.

Answer: We will use the additional $2 million to reestablish eradication in Mexico and along its border with Guatemala. Although Mexico declared the Medfly eradicated in late 1982, reinfestation began to occur in early 1983 due to the migration of large Medfly populations from Guatemala. We plan to intensify aerial spraying of pesticides and release of sterile Medflies in the area to reduce and eliminate Medfly populations.

Question: Last year, the Committee requested that APHIS conduct a feasibility study on moving the Medfly barrier farther southward, perhaps as far as Panama. Was this study conducted, and if so, what were its results?

Answer: The study is still in progress. We hope to complete it soon and will forward it to you as soon as possible. Our preliminary findings indicate that it is technically feasible to eradicate Medfly in Central America. We now have to complete our analysis of the relative costs and benefits of such an effort and determine the level of international cooperation we can expect.

GRASSHOPPERS

Question: Grasshopper infestations threaten the Northwest and the Plains again this year, yet you propose to decrease the grasshopper program by $876,000 in fiscal year 1986 (from $1.8 million). What is your reasoning for this?

Answer: The proposed decrease is for both the ongoing survey and technical assistance program and control operations. Congress appropriated $500,000 for grasshopper control in FY 1985. In the past, funding for control was not included in the regular grasshopper program. Control efforts were funded from the contingency fund and other sources as needs occurred. We expect to return to this policy in FY 1986. The reduction we are proposing in the survey and technical assistance program is $385,000. This represents our belief that the States and industry should assume a more appropriate share of program costs.

Question: Is the Secretary prepared to declare an emergency if there is a grasshopper outbreak such as the one which occurred last year, or has that type of action already been ruled out?

Answer: Unexpectedly high populations of grasshoppers in the western States in Fiscal Year 1984 caused the Secretary to declare an emergency. No funding had been available for grasshopper control. This year we have earmarked $1 million for grasshopper control and think that we will be able to plan and implement a more biologically effective program. We will reevaluate our plans should grasshopper infestations pose a more serious economic threat than we now anticipate.

Question: When the Appropriations Committee marked up the emergency supplemental appropriations bill for Africa, there was an amendment offered (and later withdrawn) to provide an additional $15 million for the grasshopper program. Information provided to us by the Department indicated that APHIS no longer plans to pay control costs on State and private lands, and to cost-share the control efforts on Federal lands. Prior to this year, APHIS has paid one-third of the costs on State and private lands, and has funded the entire cost of the program on Federal lands. Why are you changing this program at a time when the grasshopper problem is becoming increasingly difficult to control?

Answer: We believe the States and ranchers are the primary beneficiaries of control activities and should help fund these activities. Much affected Federal land is leased to ranchers for grazing. Currently those ranchers pay nothing for grasshopper control. We plan to pay 50 percent of the cost of control work on Federally owned rangelands, with the States paying the other 50 percent. The States will share in the decisionmaking process of determining the treatment areas and we have encouraged them to use Payment in Lieu of Taxes funds to cover their 50 percent share of program costs.

Question: If Congress decides to continue funding the Federal share of the program, is $15 million the proper amount to appropriate?

Answer: Total costs will depend on the number of acres actually treated and on the cost-sharing arrangements. Weather conditions in spring and summer play the most crucial role in grasshopper development. Although our survey indicates up to 9.5 million acres could need treatment, the amounts actually needing treatment are much lower than those having the potential for infestation.

BOLL WEEVIL - SOUTHEAST

Question: The budget proposes to terminate funding for the boll weevil eradication program in North and South Carolina, except for follow-up surveillance and quarantine activities. I realize that this was a 3-year project, and the current year is the third year in that project. I now understand, however, that there will be a $650,000 funding shortfall for this fiscal year. When will this shortfall occur?

Answer: The need to conduct additional control spraying in the the fall of 1984 and the spring of 1985 will cause a funding shortfall for the program. Essentially the shortfall has already occurred.

Question: Is this figure accurate?

Answer: We estimate that there will be a funding shortfall of $650,000 for this fiscal year. We are working with the growers to assure program continuation and are considering funding options.

Question: What is causing this shortfall?

Answer: A major cost factor in the program is pesticide purchases and the cost of application. Initial program estimates called for minimal pesticide application in the fall of 1984, and no treatment in the spring and summer of 1985. We expected to treat approximately 10% of the program acreage last fall. Higher than anticipated boll weevil populations in the treatment area, partially caused by unusually warm weather late into the fall season, caused treated acreage to increase dramatically to 60%.

Question: Is there now a possibility that there will be some cost associated with the program next year?

Answer: The eradication program will likely be extended through December 1985, and a containment program will begin in 1986, resulting in additional costs. We have requested $200,000 to fund an APHIS surveillance effort based on projected completion of the eradication program in the fall of 1985. Additional eradication program costs for APHIS could total approximately $500,000 should we share costs with the growers on a 70 percent grower 30 percent Federal ratio.

Question: Last year there was a proposal in the Senate to fund a boll weevil eradication program in Georgia, Florida, and Alabama. That effort was resisted because the necessary cost-sharing referendums had not been approved by cotton-growers in those States. What will be the total program cost in each State if the proper referenda are approved? What would be the Federal share in each State if Congress approved funding for this program?

Answer: Program costs are based on an approximate cost of $134 per acre, with the funding shared on a 70 percent cooperator - 30 percent Federal contribution ratio. The following table will show the costs by State.

Boll Weevil Eradication Costs

	Acres	Total Cost	Federal Share	Cooperator Share
Georgia	210,000	$28,140,000	$ 8,442,000	$19,698,000
Alabama	127,000	17,018,000	5,105,000	11,913,000
Florida	15,000	2,010,000	603,000	1,407,000
Total	352,000	$47,168,000	$14,150,000	$33,018,000

Question: What is the current status of those referenda?

Answer: Alabama has passed the authorizing legislation and is prepared to proceed with the necessary referendum. Georgia has passed the authorizing legislation to begin the program but has attached three amendments to the legislation. These amendments require that Florida also pass a referendum for an eradication program, that a minimum of 50 percent of producers must vote on the referendum, and that the referendum will not be held until after July 1st. As of now, Florida producers have not expressed interest except for an area in the northeastern part of the State contiguous with Georgia cotton.

Question: Should we expect additional funding requests from these States?

Answer: We don't expect additional funding requests from these States until they firm up their own plans and adopt the necessary legal and financial arrangements.

Question: Do you think the programs will go forward without Federal funds if Congress does not approve the Federal share?

Answer: We would expect the States and growers to regard Federal participation as a necessary component in the expansion of the Southeast Eradication Program.

BOLL WEEVIL - HIGH PLAINS

Question: The budget includes a reduced level of funding for the High Plains boll weevil program. The explanatory notes state the cotton growers can provide the additional funding if populations are higher than expected. Also, there is no funding planned for the California, Arizona, and Mexico eradication program. The explanatory notes state that the States will be able to carry out total program responsibilities. What evidence is there to show that growers are able to provide additional funding for the High Plains program?

Answer: Growers will most likely not have to put up additional funding since boll weevil populations should be low again next year. However, the High Plains Cotton Growers, Inc. has an on-going assessment which could provide the necessary funding should weevil populations be high in FY 1986.

Question: What is the goal of the High Plains program -- eradication or control?

Answer: The goal of the High Plains program is control. The program prevents the spread of boll weevil to noninfested cotton-producing areas of west Texas. The program does not have a specific end point since it is a containment program rather than an eradication program.

Question: The High Plains boll weevil program will treat 300,000 acres in fiscal year 1986. This compares to 410,000 acres in fiscal year 1984 and 75,000 in 1985. What causes this roller coaster effect?

Answer: Climatic conditions can have a significant effect on boll weevil numbers. Because of this, the extent of weevil treatments needed fluctuate from year to year. Due to an abnormally cool fall in 1984 and a harsh winter and wet spring, the overwintering survival rate for the boll weevil in the Texas High Plains was the lowest recorded in many years. Diapause treatments in the fall of 1984 also contributed to lower weevil populations. We estimate that only 75,000 acres will need treatment in FY 1985, compared to 410,000 acres in FY 1984. Because it is unlikely that the same beneficial weather conditions will occur in the fall of 1985 and winter of 1986, insect populations should tend to build up again and we anticipate treating 300,000 acres in 1986.

It is important to note that treatment periods for a given crop year spans two Federal fiscal years. The 75,000 acre estimate includes treatments conducted in October of 1984 and September of 1985. The FY 1986 acreage estimate includes treatments in October 1985 and September of 1986.

BOLL WEEVIL - SOUTHWEST

Question: What evidence do you have that California, Arizona, and Mexico will be sufficiently prepared to carry out total program responsibilities?

Answer: We have no direct evidence in this program, which is just getting underway. However, California, Arizona, and Mexico have demonstrated in other cooperative activities that they can carry out a large share of program responsibilities. We do expect to provide some technical assistance.

Question: The California, Arizona, and Mexico program was envisioned as a two-year eradication program. The program is into its first year of operation. Is it still projected to be a two-year program?

Answer: The Southwest Eradication Program is projected to last two crop seasons from its beginning in March 1985. The two crop years will span three fiscal years, 1985-1987.

Question: Should Congress decide to fund the California, Arizona, and Mexico program, how much will the total program cost, and what will be the Federal share?

Answer: The total cost of the two year program is estimated at $7 million. Based on a 70-30 cooperator-Federal cost-sharing ratio, the Federal share would be $2,250,000 and the industry share will be $4,750,000. Congress provided $1,100,000 of the total Federal share in fiscal year 1985.

IMPORTED FIRE ANT

Question: The appropriations bill specifies that $1 million of APHIS funds is to be placed in reserve for matching purposes with States that may come into the imported fire ant program. The budget requests elimination of that reserve because the budget also proposes a very limited fire ant control program. Why are you scaling back the fire ant program?

Answer: We propose to limit our involvement in the fire ant program to developing regulatory and control techniques. Control tools which can provide relief from localized infestations are now available and can be purchased by the States and by individuals. However, there are no effective chemicals currently available for large-scale aerial spraying efforts by APHIS. We believe the States should conduct localized programs. The States can also implement the regulatory procedures already developed to help prevent further spread of the pest within their borders. Since the entire Southeast is infested, an interstate regulatory effort will not contribute substantially to preventing more spread. We will concentrate on methods development activities and offer technical assistance and advice as new techniques are tested.

Question: Have the matching funds been fully utlized each year? If not, how much has remained in the account?

Answer: We have historically made about $2 million available for matching funds with the States to purchase fire ant control substances. At least $1 million has been utilized, as required by our appropriations bill, in recent years. However, we have not always been able to utilize the full $2 million. In FY 1984 we spent $1,239,640 in matching funds with the States. The remaining funds earmarked for control were unspent because some States chose not to participate in the program.

Question: Please provide for the record a chart showing how the fire ant program funds have been spent in the last three fiscal years.

Answer: We would be happy to provide that information for the record.

Imported Fire Ant
(in thousands of dollars)

	Program Components			
Fiscal Year	Survey and Regulatory	Control	Methods Development	Total
1984	$2,176	$1,300	$600	$4,076
1983	2,246	1,503	584	4,333
1982	2,384	2,193	609	5,186

ENDANGERED SPECIES ACT ENFORCEMENT

Question: Last year, the Committee report expressed our concern over the lack of enforcement of the Endangered Species Act. We requested a report in early 1985 on the improvement in efforts to enforce that Act. Have you prepared that report? If so, please summarize its contents.

Answer: We are now finalizing the report. It will deal with the endangered species regulations that were promulgated or revised and become effective in November 1984. We revised several regulations to help our enforcement of the Act. The number of ports designated for the import and export of regulated plants has been limited. We also improved our ability to gain title to plants which are imported illegally. By establishing a permit requirement for all persons engaged in import or export of regulated plants, we are aware of all the commercial traders and where they are located. To ensure the success of these regulations, we are improving the training of our inspectors.

Also, we will note that because we lack expertise in wildlife and plant investigative activities, we have entered into a reimbursable agreement with the U.S. Department of the Interior, Fish and Wildlife Service, Law Enforcement Division. The agreement will provide investigative services for alleged violations such as plant smuggling and illegal plant exporting, and provide for preparation of cases for prosecution.

HONEY BEE TRACHEAL MITE

Question: Last year, you testified, in written answers to our submitted questions, that APHIS did not believe that the honey bee tracheal mite, then called the acarine mite, posed an immediate threat requiring an APHIS program. Since that time, the mite has not only entered the United States, but has overwhelmed all control efforts to the point where APHIS is now claiming it to be an insurmountable problem. How did this outbreak happen so rapidly?

Answer: The mite is an internal microscopic parasite, which makes detection difficult. Detection can only be done by dissecting the honey bee. We believe that current infestations are at low levels and were probably present for some time before we detected them. The nature of the beekeeping industry requires much movement of beehives and makes rapid spread inevitable.

Question: Looking back, is there any way APHIS could have prepared for this?

Answer: In 1981 we conducted a survey near the U.S.-Mexico border because the mite already infested Mexico. Regular inspection and survey operations did not detect the mite until July 1984 in Texas. We believe that the current mite outbreak did not originate in Mexico, but has probably existed in the United States for some time. We believe that we took all reasonable measures to detect the pest. Our early control efforts attempted to curtail mite spread by depopulating infested beehives. However, the pest had already spread too rapidly for this method to be effective.

Question: Have any procedures been changed for assessing the potential impact of other pests or diseases?

Answer: We have strengthened our surveys throughout the States for varroa mite, the potentially most damaging parasite of the honey bee, and the Africanized bee. There are only a few places where the varroa mite does not exist, including the United States, Mexico, Central America, and Australia. There is a chance that the Africanized bee will eventually enter the United States. We have contingency plans for the varroa mite and the Africanized bee.

GYPSY MOTH

Question: What is the current status of the gypsy moth control program in the Pacific Northwest?

Answer: In the summer of 1984, a well-established infestation of gypsy moth was discovered in Lane County, Oregon. Up to 302,000 acres may be infested, although the exact size of the infestation is not known. A Federal-State quarantine is now in effect. The State of Oregon wants to conduct a control program on 212,000 on the full 302,000 acres. We have proposed a control program on a core area of 157,000 acres. The supplement to the Programmatic Environmental Impact Statement -EIS- was completed, has been forwarded to the EPA and will be available for public comment until April 14, 1985. After that date, a Record of Decision on the Final Environmental Impact Statement will be issued. Following that decision, the State of Oregon will make a decision through its EIS process. A court hearing is scheduled for April 16 in Oregon to hear opposition regarding the adequacy of the Environmental Impact Statement. Should the court's decision be favorable, the program operations could then begin. We are now exploring funding sources to allow APHIS participation in the program.

Question: How much has APHIS spent in this fiscal year for gypsy moth control in the Northwest? In the Northeast?

Answer: We are exploring the possibility of providing funding to treat isolated infestations in the Northwest. Additionally, we are providing technical assistance to the States in developing a proposed program as well as conducting some survey. The cost of this activity is about $200,000 in FY 1985. Our activities in the Northeast are limited to regulatory and survey work. We estimate that we will spend approximately $2 million in the Northeast in FY 1985.

Question: How much will control efforts cost for the remainder of the year, and what will be the Federal government's share of that?

Answer: The State of Oregon estimates control costs to range from $9-13 million depending on the area treated. Should we share costs with Oregon on a core program, the APHIS share would be $4.5 million.

QUESTIONS SUBMITTED BY SENATOR HATFIELD

CALICIVIRUS RESEARCH

Question: What level of funding is being provided APHIS in the area of calicivirus research in Fiscal Year 1985? Fiscal Year 1986?

Answer: We do not plan to provide funding for calicivirus research in Fiscal Years 1985 or 1986.

Question: A total of $80,000 was provided to ARS in Fiscal Year 1984 and 1985 for calicivirus research. ARS indicated that it was working with APHIS and keeping it informed regarding the research being performed at Oregon State University. Do you agree with the research objectives that have been pursued at Oregon State University?

Answer: Yes, we agree with the objectives for calicivirus research at Oregon State University.

Question: Do you believe there is a need for research in this area?

Answer: Yes, we believe there is a need for calicivirus research. In 1956, we eradicated vesicular exanthema, a disease of pigs caused by caliciviruses, from the United States. At that time we did not know that marine life in the Pacific Ocean was a source of these viruses. Several years later, scientists found several types of caliciviruses in sea lions and other marine life which caused vesicular exanthema when inocculated into pigs. Oregon State

University researchers are trying to determine how these viruses spread from marine life to land animals, the potential animal health hazard, and how to protect U.S. livestock.

Question: It has been suggested that there be additional studies on both epidemiology of calicivirus in potential livestock hosts and possible avenues of exposure in domestic livestock, as well as virus reservoirs and mechanisms of virus survival in nature. Do you agree with this suggestion? If not, why not?

Answer: Yes, we agree with this suggestion.

Question: Would this research more properly be conducted under the auspices of APHIS or ARS? What would be the cost of such research?

Answer: We feel that it is the Agricultural Research Service's responsibility, since it is charged with meeting the research needs of USDA agencies. At this time, we do not have cost estimates on these research needs.

GYPSY MOTH

Mr. Hawkins, I note in your statement that you outline several principles outlining your program and budget decisions. Of note to me is the need to move quickly on important pest and disease threats, to share responsibilities with the States and to fulfill the Federal role.

As you know, the Secretary has received correspondence from the Oregon Congressional Delegation, Governor Atiyeh of Oregon, and several interested parties regarding a significant gypsy moth infestation in Lane County, Oregon. I have several questions pertaining to that infestation.

Question: The Forest Service has indicated to me that trappings suggest that 250,000 to 300,000 acres may already be infested in Lane County Oregon. Of that total, approximately 70,000 acres may be Federal lands, administered by BLM, Corps of Engineers, and the Forest Service. Would you agree with that assessment of the infestation in Lane County? If not, why not?

Answer: We agree that up to 302,000 acres may be infested, although the exact size of the infestation is unknown.

Question: Would you characterize the gypsy moth infestation in Lane County, Oregon as important, thus falling within the first principle guiding APHIS programs and budget decisions?

Answer: We believe the gypsy moth infestation in Lane County, Oregon is important. That is why we are working with the State to develop an appropriate program that we could cooperatively fund and manage.

Question: Would you consider an infestation of 70,000 acres of Federal land as creating a sufficient reason for the Federal government to take a role? If not, what level of infestation would be required?

Answer: Our regulatory role is prompted by the presence of any gypsy moth infestation without regard to size. Quick regulatory action is necessary to prevent further pest spread. We believe that not only the size, but the location of the Oregon infestation makes Federal involvement in a control program proper.

Question: Should a decision be made by APHIS to provide monies to eradicate gypsy moth in Lane County, Oregon, and what sources of funding would be used to respond?

Answer: The State government of Oregon has approved $4.1 million for the purchase of Bt to be used in an eradication program. We are now considering the options available to the Department for funding any APHIS involvement. A potential source is an emergency declaration to allow the transfer of funds from other agencies of the Department.

Question: How much money would be needed to treat 158,000 acres?

Answer: It would cost approximately $9 million to eradicate 158,000 acres.

Question: 228,000 acres?

Answer: The total eradication cost is estimated to be $13 million on 227,000 acres.

Question: It is my understanding the State of Oregon has submitted three alternatives to USDA for the eradication of gypsy moth, ranging from 300,000 acres to 158,000 acres. Is that correct?

Answer: Yes, we are working with the State to select the most appropriate program from a number of options.

Question: Which figure is favored by USDA? Why?

Answer: Currently we favor a 158,000 acre project, concentrating on high priority areas. These are areas where we have evidence that gypsy moth reproduction is taking place. We believe a smaller program on such a core area would be effective and keep costs at a reasonable level, without sacrificing our chances of eradicating the infestation.

Question: If a lower figure is selected could this lead to the possibility that further acreage would have to be treated in Fiscal Year 1986, if insufficient acreage is treated in Fiscal Year 1985?

Answer: Due to the high density of gypsy moth populations in some areas proposed for treatment, we already anticipate that there will be a need to retreat some areas in 1986. A more complete survey throughout the entire 1,150 square mile quarantine area will further identify where gypsy moth reproduction is taking place and will therefore require treatments in 1986.

Question: Given the second principle of sharing responsibilities with the States, what percentage of funding would appropriately be provided by USDA to treat Federal lands? Non-Federal lands?

Answer: Historically, we have shared gypsy moth control costs on a 50-50 basis on private lands where eradication has been the goal. Until this season, no Federal lands have required eradication treatments. We believe that the 50-50 policy is also applicable to Federal lands.

Question: What is the potential for damage to the acreage, forest product industry, and the Oregon economy should monies not be provided to begin an eradication program for gypsy moth in Fiscal Year 1985?

Answer: The Forest Service estimates Oregon's timber industry to be worth $4.4 billion. Wood products and log exports from Oregon ports are valued at $878 million. An estimated 234,000 jobs are dependent upon the industry, with an annual payroll of $258 million. The spread of gypsy moth to the timber producing areas would threaten the industry. Actual losses would depend upon the density of gypsy moth populations and the level of control activity conducted.

Question: How many additional acres would likely be affected next year and in the coming years should no funding be provided in Fiscal Year 1985?

Answer: Gypsy moth naturally spreads from 5 -15 miles a year. The infested area could be expected to increase at this rate if no action is taken. In addition, we could expect artificial spread to other areas beyond the infested area.

Question: Provide the Committee a breakdown of gypsy moth funding by State and outline the purposes for which this money is being spent?

Answer: We will provide the State listing for the record. APHIS gypsy moth funds are used for survey and regulatory activities. This includes cooperative agreements with the States for surveillance through trapping. The FY 1985 appropriation does not include funding for control treatments or eradication of isolated infestations.

Estimated FY 1985 Gypsy Moth Spending by State*
(dollars in thousands)

STATE	AMOUNT
Alabama.........	$93
Colorado........	3
Connecticut.....	91
Delaware........	9
Florida.........	125
Georgia.........	72
Idaho...........	2
Illinois........	74
Indiana.........	179
Iowa............	30
Kansas..........	16
Kentucky........	84
Louisiana.......	105
Maine...........	106
Maryland........	291
Massachusetts...	55
Michigan........	117
Minnesota.......	164
Mississippi.....	83
Missouri........	46
Montana.........	35
Nebraska........	11
New Hampshire...	77
New Jersey......	83
New Mexico......	17
New York........	181
North Carolina..	165
Ohio............	156
Oregon..........	332
Pennsylvania....	335
Rhode Island....	5
South Carolina..	81
South Dakota....	1
Tennessee.......	164
Texas...........	30
Vermont.........	41
Virginia........	88
Washington......	44
West Virginia...	214
Wisconsin.......	42
Wyoming.........	33
Wash., D.C.	19

* The gypsy moth appropriation also funds $574,000 in program direction and support costs and $702,000 in methods development costs.

QUESTIONS SUBMITTED BY SENATOR MCCLURE

GRASSHOPPER

Based on APHIS's 1984 Fall survey, 15 States had a total of 55,764,795 acres infested with at least 8 grasshoppers per square yard--the threshold level where spraying can be justified. Given this level and historical experience where APHIS will likely be requested to conduct control operations, APHIS estimated that about 9,540,000 areas would be involved in a control program if all requested areas were treated. About half of this land is Federal, the other half is State or private. Given the average cost of about $3.00 per acre from the 1984 spraying program, the total cost to conduct spraying in 1985 could be about $28.6 million. Using the historical cost sharing formula where APHIS pays (1) the full cost for Federal land, (2) one-third the cost on State land, and (3) one-third the cost on private range, the total Federal cost could be as follows:

Federal share:	$18,814,000
State and private share:	9,806,000
Total	$28,620,000

APHIS, however, only has $1 million available for spraying--$500,000 from Senator McClure's 1984 amendment for the Contingency Fund and $500,000 that APHIS has set aside from undesignated portions of the Contingency Fund.

Given this potentially large funding shortfall, APHIS is attempting to shift more of the burden of financing the program to State and private landowners. In January, APHIS advised each of the States (where grasshopper outbreaks occur) of radically different cost sharing policies for 1985. APHIS' plans include the following:

-- APHIS will no longer share in the treatment costs for State land.

-- APHIS will no longer share in the treatment costs for private rangeland.

-- APHIS would pay one-half of the cost of treating Federal land. States and private landowners would pay the remaining costs. APHIS suggested to the States that each State pay for its share of treating Federal land with monies paid the States under P.L. 94-565, which makes Federal payments to local governmental units in lieu of taxes that would be paid on Federal lands.

-- The available Federal funds would be expended in States on a "first come, first-serve" basis.

APHIS's plan, if carried out, would reduce the potential Federal obligation from about $19 million to about $7 million.

The States have vigorously objected to APHIS' announced plans. Nevada, for example, called the plan "totally unworkable". As one of several arguments, Nevada said that local governments have already committed funds under P.L. 94-565 for other purposes.

Given the situation described above, several questions could be asked.

Question: Based on the results of APHIS's 1984 adult grasshopper survey, does APHIS anticipate that spraying operations will be needed in 1985 to control grasshopper infestations that meet or exceed the control threshold of 8 grasshoppers per square yard? If so:

Answer: Yes, we do anticipate that some level of spraying operations will be needed in 1985 to control grasshopper infestations.

Question: In how many States does APHIS estimate spraying operations might be needed?

Answer: We estimate that spraying operations could be needed in up to 15 States.

Question: How many acres does APHIS estimate will need to be treated?

Answer: Based on fall survey results, up to 9.5 million acres could need treatment. However, the fall survey can only estimate a potential for treatment. Climatic conditions are a major factor. Actual treatment needs, historically, are far below those levels the fall survey indicates may be necessary.

Question: How does the estimated acres that would need treatment compare to control programs performed in the past?

Answer: If the entire 9.5 million acres were treated, this would be the largest control program we have ever conducted. In some years, the fall survey has indicated the potential for large treatment programs which did not materialize the following spring.

Question: How many of the acres are on Federal land?

Answer: Of the 9.5 million acres, 4.5 million acres are on Federal land.

Question: If all the areas were treated, how much would the treatment cost?

Answer: Based on an average cost of about $3 per acre, it would cost $28.6 million to treat 9.5 million acres.

Question: Based on the one-third cost sharing method used in the past, what would be the Federal share of this total treatment cost?

Answer: The Federal share would be $18.8 million based on the one-third cost sharing method. This includes full costs of about $13.5 million on Federal lands and $5.3 million as the one-third share on State and private lands.

Question: How much money has APHIS available for the 1985 grasshopper control program?

Answer: We have $1 million earmarked for a grasshopper control program.

Question: What are APHIS' plans for dealing with a large grasshopper infestation for 1985?

Answer: We plan to conduct control efforts on Federal rangelands, as infestations reaching economic levels occur, on a 50-50 cost sharing basis with the States. We have $1 million available for control work. Should infestations reach unusually high levels and pose a serious economic threat, we will reevaluate our plans.

Question: How do these plans differ from the one-third cost sharing arrangements used in the past?

Answer: In the past, APHIS funded the entire cost of the grasshopper control program on Federal land and shared one-third of the costs on private lands.

Question: On what basis does APHIS believe the States would pay for one-half of the cost of treating Federal land?

Answer: We believe our policy to pay 50 percent of the cost of grasshopper control on Federally owned rangeland is equitable. Much Federal land is leased to ranchers for grazing. Private ranchers using Federal lands for grazing and the States should share in the cost of protecting those lands. To help defray the costs, we suggest that the States and counties use Federal payments they are receiving in lieu of taxes to help pay their share for grasshopper control.

Question: Does APHIS's plan for 1985 include asking the Secretary of Agriculture to use his emergency funding authority to obtain needed funding?

Answer: We do not foresee the need to ask the Secretary to declare an emergency. We expect that our plan to use the $1 million available for grasshopper control will prove sufficient, if the States agree to share the costs.

Question: Did you discuss your plans with the Bureau of Land Management and the Forest Service?

Answer: Yes, we discussed our plans with both agencies.

Question: Did these agencies have any reservations about your plans in light of their responsibility to protect and manage Federal land?

Answer: The Forest Service and the Bureau of Land Management stated that they did not have money available to contribute to grasshopper control and did not offer an opinion about our plans for funding the program.

Question: Also regarding these agencies, what is the current status of the Memorandums of Understanding with these agencies and what role will they play in the 1985 treatment program?

Answer: The Memorandums of Understanding signed in 1983 remain in effect. They provide the legal basis for APHIS to conduct pest control programs on land managed by these agencies, subject to available funding.

Question: Have the States responded to your announced new plans?

Answer: Most States have responded in oposition to the plan. Some have expressed concern because they have committed their entire PILT funds.

Question: If money were available to spray all areas where you have estimated that treatment may be needed and requested, do you have sufficient staff to effectively carry out the needed control work? If not, about what extent of the work could not be carried out?

Answer: We do not have sufficient staff currently in place in the likely areas of treatment. However, we could temporarily transfer APHIS specialists from other locations and arrange for a loan of Forest Service employees to handle the management part of the project. These specialists would supervise the spraying contractors' activities and assure proper technical procedures. State employees and temporary Federal personnel could be hired to handle the less technical aspects of the spraying program.

Question: If a control program is not conducted in 1985, what do you estimate the damage to crops and rangeland to be if your current estimates of the potential grasshopper infestations actually occur? Based on your previous experience with control programs, to what extent would the losses be reduced if control programs were conducted?

Answer: If a control program is not conducted, there could be damage in those areas where the range is already in poor condition and to adjacent crops. The damage would be moderate to severe dependent on the range condition and grasshopper populations. Effective control programs can reduce losses by up to 90 percent.

Question: If control programs are not done in 1985, are we more likely to experience serious infestations again in 1986?

Answer: We cannot predict until the spring and early summer of 1986 how serious the grasshopper infestion might be. Weather conditons will greatly impact the situation no matter what type of program we conduct in 1985.

QUESTION SUBMITTED BY SENATOR KASTEN

BRUCELLOSIS

The Administration has proposed to reduce funding for brucellosis eradication from $73.4 million in Fiscal Year 1985 to $58.5 million in Fiscal 1986, a reduction of almost $15 million.

Question: With a less extensive Federal brucellosis program, how can APHIS ensure that cattle from States that drag their heels in brucellosis eradication do not bring the disease into States like Wisconsin?

Answer: Although the overall Federal brucellosis program will be less extensive, we plan to strengthen our efforts to prevent interstate spread of disease through increased emphasis on compliance and enforcement. Also, to ensure that we quickly identify any disease, we will continue the current level of primary surveillance in the brucellosis program.

QUESTIONS SUBMITTED BY SENATOR BURDICK

VETERINARY BIOLOGICS

APHIS currently funds a program to prevent the production and interstate distribution of worthless, contaminated, dangerous, or harmful veterinary biologics used by livestock handlers. APHIS will propose legislation to have these costs paid for by the program beneficiaries.

Question: You indicate an intention to propose legislation to have the program beneficiaries pay for the costs incurred by APHIS to prevent the production and interstate distribution of worthless, contaminated, dangerous, or harmful veterinary biologics used by livestock handlers. Who are these beneficiaries and how will these user fees be assessed?

Answer: We are referring to the producers of veterinary biologics. Regulated producers benefit from the program through improved quality control and increased consumer confidence in their products. Although we have not made a decision on exactly how we will assess the fees, we are considering several alternatives. One possibility is to charge a license fee for each establishment, each product, or some combination of the two. A second alternative is to charge each company a fixed percentage of their gross sales to cover the cost of the program. A third alternative is to assess a charge each time a serial of a licensed product is released by APHIS for sale. Before we determine which alternative will be proposed, we will obtain the views of affected producers.

Question: If the users are unable or unwilling to bear the costs, will the program cease to exist?

Answer: We know of no reason why producers should not be able to bear the costs of the program. We are making every effort to assure that the fees are equitably shared by the producers. Also, passage of legislation granting APHIS the authority to regulate intrastate veterinary biologics producers would provide a broader base for user fee assessment. Costs for individual producers would be less.

GRASSHOPPER

APHIS is proposing to cut funding for grasshopper control by almost 50 percent for FY 1986. Yet in 1984 its predictions for grasshopper populations were extremely low and the Secretary had to transfer funds from the Commodity Credit Corporation to help with the problem.

Question: In 1984 your predictions for grasshopper populations were extremely low and the Secretary had to transfer money from the Commodity Credit Corporation to help with the problem. However, you propose to cut grasshopper funding by almost 50 percent. What are your projections for 1986 and how can you justify the decrease in funding given your past experience?

Answer: We cannot make preliminary projections on the level of grasshopper infestations for 1986 until we complete surveys in the fall of 1985. These projections are subject to change before the infestations actually occur due to climatic changes, which can greatly affect grasshopper population levels.

The proposed decrease is for both the ongoing survey and technical assistance program and control operations. Congress appropriated $500,000 for grasshopper control in FY 1985. In the past, funding for control was not included in the regular grasshopper program appropriation. Control efforts were funded from the contingency fund and other sources as needs occurred. We expect to return to this policy in FY 1986. The reduction we are proposing in the survey and technical assistance program is $385,000. This represents our view that the States and industry should assume a fairer share of program costs.

Question: If your predictions are off again, are you prepared to transfer funds to deal with the shortage, and from where would you transfer such funds?

Answer: We will continue to work closely with the States to monitor grasshopper infestations. Should grasshopper infestations create a more severe economic threat than we anticipate, and control needs exceed available resources, we will reevaluate program plans.

QUESTIONS SUBMITTED BY SENATOR CHILES

MEDITERRANEAN FRUIT FLY

As you know, in the past year Florida has experienced an outbreak of the Medfly. The State of Florida and the Federal government have both worked hard to eradicate this infestation and to prevent reoccurrence. Many consider the best way to prevent further problems is to try and contain the pest in the Central American area, thereby making it more difficult for it to reach the U. S. I believe that currently APHIS is attempting to stabilize a barrier line along the Mexican/Guatemalan border.

Question: Doesn't it make more sense to try and move its biological barrier further south, perhaps to Panama?

Answer: We are dealing with this question now and hope to be able to give you a determination soon. As a general principle, we gain more protection from a pest as we push it away from our borders. However, we have to consider many factors before beginning a large eradication program. One major factor is cost. We need to determine if the benefit of additional protection outweighs the program's cost. Another factor is technical feasibility - can we be successful with the tools we have in a particular area? We need to address these issues before we can recommend the best course of action on moving the Medfly barrier to Panama.

Question: Last year the Committee expressed its concern that it may be difficult to hold the line in certain isolated areas of Guatemala and Mexico and directed APHIS to perform a comprehensive feasibility study of further southward movement of the barrier. Have you completed this study? Would you tell me what you found?

Answer: We are still working with representatives from the Central American countries to complete the study. Our preliminary findings indicate that Medfly eradication is technically feasible. We are now analyzing the cost-benefit data and determining possible scenarios which could affect our estimates. We will forward the results of the study to you as soon as we finish this analysis.

Question: What would the cost be of pushing the Medfly out of Central America and what are the chances for success of such a program?

Answer : We are in the process of developing cost estimates, which we will forward to you as part of the study. Many unknowns are involved, such as just how many times we would have to spray coffee fields heavily infested with Medfly. The chances of success are related to these unknowns. We do know that the technology exists for an eradication program. However, we can't predict climatic conditions, and infestation levels in areas where we do not have good data.

Question: What steps are currently being taken to prevent reinfestation north of the current barrier?

Answer: We have intensified our regulatory and control activities in Guatemala and Mexico. We will be spraying 200,000 acres on the Mexico/Guatemala border and approximately 150,000 acres in Cobán, Guatemala. As Medfly populations are reduced, we will begin to release sterile flies in the area to further prevent reinfestations north of the barrier.

Question: How much money is being recommended for the Medfly program in Fiscal Year 1986?

Answer: We recommend $8.6 million for the Medfly program in fiscal year 1986.

Question: Does this amount provide for any southward movement of the barrier?

Answer: The amount recommended for FY 1986 will not provide for southward movement of the barrier. It will allow us to reestablish a firm barrier at the Mexico-Guatemala border and reduce populations in Guatemala to prevent constant reinfestation of Mexico.

Question: How much in contingency funding is being requested?

Answer: We are requesting $3 million for the contingency fund. However, we do not plan to earmark any contingency funds for the Medfly program in FY 1986. We will review all pest and disease situations in FY 1986 before making a judgement as to the fund's use.

FRUIT FLY FREE ZONES

In the past few years this Committee has expressed its interest in research that seeks to establish fruit fly free zones that would eliminate the need for fumigation of fruit as currently required by some States and foreign governments. This is especially critical given current chemical fumigation restrictions on fruit.

Question: What efforts has APHIS made to bring about the establishment of fruit fly free zones?

Answer: We have developed guidelines and implemented protocols in Belize for mangoes. In Mexico we have developed guidelines for citrus, peaches, and apples based on negative trapping, bait sprays, and cultural practices such as host periods.

Question: What efforts has APHIS made to cooperate with the State of Florida to study the Caribbean fruit fly and help establish fly-free citrus zones there?

Answer: We have ongoing efforts with the Florida Department of Agriculture and Consumer Services to develop both fly-free citrus zones and a sterile release program. We are trying to develop a fly-free zone in Indian River County and have committed two people for the Sterile Insect Laboratory. As part of the effort, we have calibrated the trap available for this pest to provide basic population data.

Question: Have any methods development funds been used for this purpose? If so, how much?

Answer: We used about $100,000 of methods development funds to study fly-free citrus zone methodologies.

NOXIOUS WEEDS

Question: How has APHIS supported the University of Florida in its effort to control hydrilla?

Answer: We have a $60,000 cooperative agreement with the University of Florida for hydrilla control studies.

Question: Have the use of biological controls proved successful in this effort?

Answer: The use of grass carp has proven successful in helping control hydrilla. It does not eradicate the weed.

Question: Do you anticipate continued APHIS funding support of the University of Florida in this effort?

Answer: We do not plan to continue providing funding in FY 1986. The results of the hydrilla project in Florida are more far-reaching than for agricultural uses alone and benefit the public directly as opposed to primarily agricultural interests. We believe other agencies should consider supporting this project.

QUESTIONS SUBMITTED BY SENATOR BUMPERS

BRUCELLOSIS

Question: Last year I introduced S.3010, a bill which I intend to reintroduce soon, that would give the States more flexibility in combatting brucellosis within the cooperative State-Federal program. This bill would allow indemnities to be paid on the slaughter of female calves instead of the mother cows, would allow States to readily transfer indemnity funds to the vaccination and testing program, and would give States more authority concerning depopulation programs. Although some of its provisions are currently allowed administratively, my bill would codify these options. Does APHIS have any objections and could APHIS support the bill?

Answer: We can already carry out the provisions of S. 3010 administratively and believe this legislation is therefore unnecessary.

Question: Recently, I have learned that nine AHT's (Animal Health Technicians) in Arkansas are being forced to move as part of a one-State restructuring program. Although I support moving AHT's to areas of high incidence of brucellosis or other threatening diseases, upon looking at the maps, I am completely at a loss over the need for the transfers. AHT's are being moved from areas of high incidence of brucellosis to low, and two AHT's are being forced to move to different offices even though one is being sent to an office within 25 miles of the office the other is being sent to. Some areas of high incidence are being completely understaffed. Does the Veterinary Service even have a rational plan for such moves, if so, what is it?

Answer: We have initiated a number of actions in Arkansas to solve problems identified by our program reviews and in response to recommendations of the Arkansas Livestock and Poultry Commission. The first action was the replacement of the top management team; the second was the formation of new and fewer sections. This has resulted in the relocation of three veterinarians and the retirement of two others. The final action was to identify "ideal" locations for animal health technicians and locate all field personnel in these places.

In our selection of locations, we considered the distribution of livestock markets, licensed swine feeders, brucellosis infected and noninfected herds, and licensed animal dealers, exhibitors, and research facilities. We chose those locations that would provide access to all areas of the State in order to best serve program needs.

APHIS policy is to offer reassignments to employees in areas affected by program changes, such as this, prior to conducting a formal reduction in force which would affect all employees within the State. We offered affected employees reassignments on the basis of veterans' preference laws and seniority. In seniority order, employees who were not in the new locations were offered vacancies in their present section which would involve the shortest move. If there was no vacancy in their present section, we gave them their choice of three other vacanices in understaffed sections, with the most senior employees getting preference.

FOOD SAFETY AND INSPECTION SERVICE

QUESTIONS SUBMITTED BY SENATOR COCHRAN

USER FEES

Question: How fast would you plan to implement the user fees?

Answer: The user fee system being contemplated would be introduced over a three-year period beginning October 1, 1985.

Question: Would there be a gradual increase in the fee schedule over the three years, with very little income planned for the agency the first year, and most of the changes coming in the third year?

Answer: We plan to increase fees so as to recover one-third of meat and poultry inspection costs in the first year; two-thirds in the second year; and the total costs of inspection in the third year.

Question: Industry groups have expressed concern that there would be no competitive alternative for the inspection services. They say that they would have no bargaining power, so they would be compelled to pay whatever fees were established. How do you propose setting rates and maintaining them at fair levels?

Answer: It appears that a single system of establishing fees may not be appropriate for all segments of the industry. We will have to design an appropriate user fee system for the various industry segments subject to inspection such as slaughtering plants, processors and importers. Although the details of the system have not been worked out, a draft proposal is being examined in the Department. Equity will be a key factor in any proposal under consideration.

It should also be noted that FSIS would not directly receive any of the income, but would require annual appropriations to fund the inspection program. This continued Congressional approval and review process would prohibit increased program costs solely at the agency's discretion. The three-year transition period would also give FSIS an opportunity to refine its fee setting formula in order to make it as equitable as possible.

Question: What impact would user fees have on consumer prices?

Answer: The cost of inspection would be only a fraction of a cent per pound of product and each firm would have the choices of: passing the cost back to the producer; passing it on to consumers; or absorbing it itself. A firm's selection of choices will depend on its own competitive situation in both its supplier and product markets. This will differ from firm to firm and from product to product.

COMPLIANCE-BASED PROCESSING INSPECTION

Question: You are planning to submit legislation that would grant the Secretary discretion to schedule inspection at processing plants based upon such criteria as the nature of the product produced and the plants' compliance histories. Could you please outline what this entails?

Answer: Under present authority, FSIS is required to conduct continuous inspection in processing plants regardless of the public health risk presented by the plant or product. This authority for "continuous" inspection was established in 1906 when plant conditions and production processes could be best monitored by personal observation of the inspector. Today, the agency needs the management flexibilty to take advantage of modern food production technologies to increase the efficiency of meat and poultry inspection. FSIS is requesting discretionary authority to vary the intensity of its inspection in processing plants on the basis of the risk to health presented by a plant or its product. The legislation would permit us to reduce inspection coverage where current levels are more than needed to maintain public protection and to increase it where a higher intensity of inspection can reduce public health risk.

Question: What procedures will be in place under the new system to ensure that quality is maintained at all times?

Answer: Any reduction in inspection time under the discretionary authority would apply only to plants having a system of production controls that enables the inspector to monitor the production process as well as or better than he is able to do under traditional inspection. New production technologies provide the plant with more detailed information on the operations of the establishment than the inspector can acquire using traditional inspection methods. Where these systems exist the agency can utilize them to do a better job of inspection in less time.

Question: What could be some of the disadvantages of the system?

Answer: The Agency does not expect that the granting of discretionary authority by Congress will result in any situation where we can not maintain or improve inspection effectiveness.

Question: What will be the advantages of this system to FSIS, the processors, and the American public?

Answer: Without increasing the cost of inspection, the agency can increase the effectiveness of its activities in reducing public health risk. The public will benefit from effective inspection at a lower cost. The processors could benefit by avoiding certain kinds of inspection costs such as overtime and holiday inspection that they presently must pay and, by detecting production problems earlier in the process, avoid costly reworking of product and even more costly condemnation.

IMPORT/EXPORT

Question: How does your Automated Import Inspection System function?

Answer: Every shipment of meat and poultry product offered for entry into the United States is accompanied by an inspection certificate that identifies the product by origin, destination, shipping marks, and quantity. It is also a certification by the exporting country that the product is wholesome, unadulterated, properly labeled, produced in a certified plant, and has received all required inspections. FSIS inspectors examine the product to ensure compliance with the same U.S. standards, as those applied to domestic product. All pertinent information about the product shipment is entered in the Automated Import Information System (AIIS) and search is made to determine if the foreign establishment is acceptable and if the product is permitted entry into the United States. The AIIS also lists the detailed inspection assignments for the shipment based on the product history of the establishment. The inspection assignment includes all required product examinations and laboratory tests, as well as a set of random numbers for use in sample selection.

Meat and poultry products are specifically assigned to six basic categories of inspection: net weight, condition of container, product examination, label examination, incubation of canned goods, and laboratory analysis. Within these categories there are more than 150 examinations that may be assigned. Specific examinations are assigned on the basis of the specific type of product and establishment compliance history. When inspection is completed the results of the inspection, including the number and types of defects found, are entered in the AIIS to update the establishment's compliance history.

Question: Are the inspection rates, sampling programs and skip-lot sampling authorizations determined according to compliance histories of individual shippers and countries?

Answer: When an establishment begins exporting to the United States, all lots (shipments) of product are inspected and the results entered in the AIIS. If 10 consecutive lots pass inspection within a 180 day period, future lots of the same product from that establishment may qualify for skip-lot inspection. Skip-lot inspection allows inspection resources to focus more intensively on establishments that have had compliance problems. Skip-lot is divided into two levels: skip-lot 1 assigns full inspection to at least one of every four lots, skip-lot 2 assigns full inspection to no fewer than one of every six lots presented. A random selection process ensures that no one can know which lots will be subject to full inspection.

Question: How do U.S. import regulations compare with regulations in other countries for the products we export?

Answer: USDA import regulations are designed to implement the requirement of the Federal Meat Inspection Act that product exported to the United States be produced under inspection systems which are at least equal to that in the U.S. At the same time the regulations recognize through the concept of equivalence that procedural variations may be permitted if the same levels of control are accomplished. USDA believes that its import requirements incorporate the highest standard of public health protection and do so in a way that can accommodate differing means of achieving this end.

We have experienced some cases where other countries rigidly impose requirements that are applicable to their own animal production and processing situations but not relevent to what may exist in the U.S. In other instances, unrealistic standards are imposed which do not have practical significance. The U.S. considers some microbiological standards imposed by other countries to be unrealistic and of limited public health consequence.

Question: What major barriers do you see to increasing U.S. exports to other nations?

Answer: The present barriers to increasing U.S. exports include: the high value of the dollar on the international market; inflexible application of public health requirements designed for situations in the importing country but inappropriate to production and processing practices in this country; subsidized production of meat/poultry product by competing suppliers, such as for French and Brazilian shipments of poultry to the Middle East; and protectionism in various guises.

EMPLOYEE HEALTH AND MORALE

Question: You have discussed broadening your authority to permit withdrawal of inspection services when there are threats or actual assaults on program employees. What is the nature of most interference?

Answer: Instances of threats or actual assaults against program employees occur infrequently. Over 7,200 meat and poultry establishments are covered on a daily basis and generally few problems are encountered. Occasional problems do occur, in the form of verbal abuse, threats or physical assaults, or damage inflicted on personal property, and when this does occur the agency must have the authority to react quickly and effectively to protect the inspectors and the integrity of the inspection program.

Question: Is there a real problem and how often is there some type of interference as employees perform their jobs? How often are employees in physical danger?

Answer: Instances of actual assault are rather rare, but they happen more often than we would like. Perhaps once a month there is a case of an inspector's encountering intimidation or threats; perhaps once a year there is a case of an inspector's encountering actual physical danger, such as a knife pointed at him. In a recent case, a plant owner struck an inspector. The problem is very real when it does occur. Authority to take strong, prompt action is necessary to enable the inspector to continue to perform his duties.

Question: What can FSIS do now when there are threats to employees?

Answer: Regulations allow FSIS to temporarily suspend inspection until adequate, formal assurances are received that the situation has been corrected and that there will be no recurrence of the problem. Normally such assurances are rapidly forthcoming when a problem occurs and suspensions of operations are for a short time period. However, since January 1982, there have been three instances where expedited formal hearings before Administrative Law Judges have been required to eliminate the problem.

Question: Why is legislation needed to expand current authority?

Answer: Legislation would codify FSIS authority in this area and expand FSIS authority allowing the agency to withdraw inspection services for specific amounts of time for actual assaults or threats of assault. This change would give the agency an enhanced capability to handle severe problems. Protection of the inspectors from attempted coercion is absolutely essential.

Question: Increasing broiler linespeeds from 70 birds-per-minute to 91 in slaughter inspection would tend to imply a need for greater concentration and rapid decision-making on the part of inspectors. What types of reaction do you get from employees when you increase linespeeds or initiate other practices that might appear to increase workloads or work pressures?

Answer: Traditional and Modified Traditional inspection methods require inspectors to inspect for disease and conditions that needed trimming. The New Line Speed (NELS) Inspection System allows the inspector to concentrate on disease conditions while obvious, readily observable trim conditions are allowed to be independently trimmed by plant employees. By removing this trim responsibility, the inspector is able to inspect more birds per minute which translates to faster production line speeds. The exact time was determined by work measurement calculations. The line speed was set based on a 100 percent workload for each inspector. The identical work measurement techniques were used to set the 70 birds per minute for the Modified Traditional Inspection (MTI) method. The inspectors working under NELS have no greater workload than those under MTI. In the arbitration process which resulted in our current labor contract, the arbitrator upheld the validity of our engineered, field tested work standards.

Question: Is this possibly increasing pressures on employees that could lead to health problems?

Answer: Stress studies are now being planned by the Agency. Preliminary observations of the NELS inspection procedure have shown more alertness and involvement by the inspector. Speed does not appear to be a problem. Under the system, the inspector in charge may slow linespeeds when birds are not presented properly or flock health conditions dictate a more extended inspection.

Question: How does your new inspection system address this potential danger?

Answer: By applying work measurement techniques, the impact of each type of presentation error was determined. A standard was set based on the total impact of all errors. Line speed reductions are required when the standards are exceeded. This type of control assures that the workload will remain fairly constant on the inspector. Plants failing to meet these standards are not allowed to run the maximum line speeds.

Question: Are there any morale problems?

Answer: The employee organization representing FSIS food inspectors has expressed to the agency the concern of its members over a number of working conditions, including the introduction of new inspection methods, work schedules, methods of settling disputes, and employee stress. While these concerns are real there are other indications that overall employee morale is good. In a recent Quality of Life Survey conducted by the USDA's Office of Personnel, over 97 percent of the FSIS respondents responded positively to the statement "I feel that the work I do is worthwhile" and over 85 percent agreed "I feel that I'm an important member of my unit".

Question: What changes are being made in the inspection process to accommodate the higher speed?

Answer: The major change is that the new inspection system assigns to plant employees the responsibility for identifying and trimming obvious manufacturing defects, functions previously performed by FSIS inspectors. Under the new system, plant employees trim carcasses as part of an inspector-monitored quality control system. The Agency has also required better lighting and other work station improvements to make the inspector's job easier. The new light standards allow an inspector to recognize lesions with less strain. The Agency has a lighting task force which will continue to design lighting arrangements for the new inspection systems.

PLANT-OPERATED QUALITY CONTROL PROGRAMS

Question: One of your new directions combines new slaughter inspection procedures with plant-operated quality control (QC) programs. What has prompted you to move in this direction?

Answer: The program is designed to identify production defects early in the process so that preventive measures can be used to reduce the defects, and prevent them from occurring again. Standards are set by plant management, and predetermined actions followed if the standards are not met. Checks are made throughout the day, and records kept to determine the performance. Management can accumulate these records, review them to determine what is happening throughout the production process, and assure themselves of process control. When the process is in control, very few processing defects will occur on the finished product.

Question: What are some of the advantages?

Answer: Studies performed by FSIS have shown that products produced under these new inspection systems are equal to or better than those produced under the traditional inspection methods.

The design and application of the new inspection system allow better utilization of USDA inspectors. Production linespeeds are faster since responsibilities are shifted from inspectors to plant personnel, and the industry has less cost associated with out-of-compliance product that must be condemned or reworked.

Question: Could FSIS be criticized as relying too much on plants themselves to ensure a quality product, with FSIS playing only a reduced, monitoring role?

Answer: The plant-operated QC programs are designed to assure process control by plant management. This responsibility has always been a plant function. The inspector will continue to be present in the plant to assure that the plant QC program is operating properly and product is in compliance.

Question: Could this be viewed as "assigning the fox to guard the chicken house?"

Answer: While the duties of our slaughter inspectors will change as a result of the establishment of a quality control program, the inspectors are not being withdrawn from the plants. We expect to be able to reduce the size of the inspection force assigned to a QC plant as the plant does a better job of controlling the quality of its product, but there will continue to be at least one inspector present during slaughter operations. The inspector, or inspectors, will continue to oversee plant operations, check product for disease conditions, draw product samples to be tested in the laboratory for residues or other contamination, and perform other duties essential to assure the wholesomeness of the end product. We are not conceding responsibility for inspection to the plant. The quality control program merely requires that the plant follow certain procedures which will reduce the workload of the inspector, but which, by no means, eliminate the need for an inspector.

Question: Can you still assure the public of the same quality monitoring as under previous systems when you are only periodically sampling finished products?

Answer: The QC program is designed around finished product standards that were developed by this Agency. These standards must be met before product is allowed into commerce. Studies have shown that a production process that is controlled by a QC program designed around the finished product standards produces higher quality, more uniform products than with traditional systems.

FEDERAL PROCUREMENT

Question: You are tightening eligibility requirements for firms wanting to sell meat and poultry products to the Federal government. Why can't plants under your Intensified Regulatory Enforcement program sell to government if they can sell to the general public?

Answer: Plants are placed on IRE status after a long history of problems in meeting sanitation and other regulatory standards. FSIS' additional regulation insures a safe and wholesome output of product from these plants. However, their demonstrated inconsistencies in performance, in USDA's view, casts doubt on their ability to meet the quality and specifications requirements in USDA food purchase program contracts. We feel that this is a prudent course of action.

Question: Is this to provide a subtle form of pressure to encourage change by the plants?

Answer: The IRE program is designed to assure the public of safe and wholesome production from plants in the program; it is not a punitive measure.

NATIONAL ACADEMY OF SCIENCES REVIEW

Question: Part of your "Five Point Program" is a thorough review of the effectiveness of existing and proposed inspection approaches. I realize this study won't be finished until mid-year, but have you had any informal feedback that might signal future directions for your programs?

Answer: The National Academy has told us the report will be completed on time but has not discussed the contents of the report with us.

Question: You have said this independent National Academy of Sciences study is needed because some people have criticized the changes being made in your inspection procedures. What have been their major concerns?

Answer: Critics of the program have been concerned that the changes made in meat and poultry inspection to increase the program's efficiency are lowering the traditional standard of protection maintained by the Agency. The Agency's policy, with respect to program changes, has been to institute changes only if it found them to be at least as effective as the current method of inspection. The Agency asked NAS to review the changes that have been made, and changes being contemplated in meat and poultry inspection to determine if they have a sound scientific basis.

FSIS ASSISTANCE TO OTHER NATIONS

Question: How many people have been trained in recent years, and what impact has this had on their compliance with our import requirements; and on the amount of inspection required by FSIS?

Answer: Since 1980, nearly 500 persons from 30 different countries have received a variety of training and technical assistance from FSIS personnel. These sessions have ranged from 2-day technical seminars on new methods for regulating cured pork products to 2-week laboratory programs in residue testing methods and techniques.

FSIS believes that training, and other technical assistance provided to foreign inspection officials has improved their ability to comply with U.S. import requirements, and given them greater confidence in the products they purchase from the United States. Port of entry rejection rates have decreased over the years as foreign systems became more familiar with the techniques, and procedures necessary to produce satisfactory products.

The purpose of import inspection is to monitor the compliance of each foreign meat inspection system with U.S. requirements. The intensity of import inspection is dependent upon the compliance history of each establishment. If satisfactory product is consistently presented for inspection, the rate of sampling is decreased. However, if unsatisfactory product is presented, the sampling rate is increased and all product is held until all inspection procedures are completed.

When training improves the understanding of U.S. requirements by the foreign inspection system, and this results in the production, and subsequent export to the U.S. of satisfactory product, import inspection will be decreased. Training in quality control programs, chemistry methodology, inspection and supervisory techniques has resulted in decreased rejections at port of entry for products such as boneless beef and cured pork products.

Question: You indicated that six countries were removed from the list of eligible exporters only after you had provided repeated notifications and technical assistance to help them correct their deficiencies. What types of assistance were provided?

Answer: In addition to the continuing advisory sessions, training and technical seminars, which I covered in response to your last question, and which are available to all exporting countries on a regular basis, we have taken additional steps to handle problems in those countries with serious deficiencies.

In March 1983, we provided all exporting countries with the regulations that were published February 1983 pertaining to the Farm Bill. From February to June, we gathered information on the compliance of each actively exporting country. In July 1983, we notified each country of its deficiencies and changes necessary to meet our requirements. At that time we set a January 1, 1984, deadline.

In December 1983, we received information on foreign laboratory capability, procedures, methods, results and residue monitoring programs. At that time, 14 countries failed to meet minimum requirements, and were notified December 26 that they would lose their eligibility. Eight of the 14 countries made immediate changes and were able to bring their laboratories into compliance. Six countries--El Salvador, Dominican Republic, Haiti, Panama, Nicaragua, and Mexico--still had not made the necessary corrections and were delisted effective February 15, 1984. This means that these countries were no longer recognized as eligible to export to the United States, and products certified after that date could not be exported to this country. Panama, Nicaragua, and El Salvador have since provided evidence of compliance and been returned to the list of eligible exporting countries. The Agency conducted a 2-week training course in chemistry methodology and procedures at the FSIS lab facility in Athens, GA. Each Central and South American exporting country was invited to send one or more chemists to the residue course. Argentina, Brazil, Costa Rica, Dominican Republic, Guatemela, Honduras, Mexico, Nicaragua, and Uruguay sent representatives.

Question: Why weren't changes made by the countries involved? Was it that capital improvements were required and countries simply didn't have the necessary financing?

Answer: The most probable causes contributing to the eligibility removals were the lack of finances and limited scientific and technical expertise available within the country.

Question: When scientists from foreign countries are trained in chemical laboratory procedures, slaughter techniques, and other topics to help them comply with requirements for exporting to the U.S., is this done in the U.S. or overseas?

Answer: Training programs for foreign officials are usually conducted at facilities in the United States. Hands-on training in chemistry procedures has been done at FSIS laboratories in

Beltsville, Maryland; Athens, Georgia; and St. Louis, Missouri. Formal classroom training in inspection procedures has been done at the FSIS facility in Fort Worth, Texas. Additional training has been provided through technical visits to U.S. inspected plants. Some technical assistance is provided onsite in other countries such as during reviews of foreign operations by U.S. technical experts. Foreign Programs Officers regularly offer assistance to foreign officials during their routine system reviews. In addition, the chemists and microbiologists that conducted compliance reviews for 1981 Farm Bill requirements offered technical assistance upon request.

Question: Who pays for training foreign specialists and is any of this done in collaboration with the Agency for International Development?

Answer: The cost for providing training personnel and facilities in the United States is provided by FSIS; the transportation and lodging costs are provided by the foreign country or by the Agency for International Development.

Question: To what extent are American companies involved in joint ventures with companies that export to the U.S.?

Answer: FSIS does not maintain information concerning U.S. companies involved in overseas meat and poultry operations.

Question: Can you notice differences in compliance with regulations and demands on your services when American companies are involved?

Answer: I wouldn't expect any differences.

INTENSIFIED REGULATORY ENFORCEMENT

Question: When plants consistently fail to operate within acceptable regulatory bounds, you have initiated an Intensified Regulatory Enforcement program. Exactly what does this mean to the plant?

Answer: The objective of the IRE program is to establish an environment in which plant management achieves and maintains consistently acceptable operating practices. With the exception that an IRE-designated plant is not eligible to bid on USDA food procurement contracts, there are no punitive actions resulting from the IRE designation. The plant is free to continue production, marketing, and distribtuion of its products. It does mean, however, that the plant's activities will be monitored very closely. The nature of these intensified inspection and enforcement actions will vary depending upon the particular problems of non-compliance in each plant. FSIS may choose to increase the number or type of inspection personnel at the plant, to increase the frequency of particular inspections or the product sampling within the plant, or take other actions necessary to assure the plant operates in compliance with USDA regulations.

Question: Why is this an effective tool for handling marginal operations?

Answer: The inspection team is composed of the inplant inspection personnel and representatives of each supervisory level, including headquarters. The team approach has been extremely successful in identifying plant problems and developing specific regulatory actions by each supervisory level in dealing with plant management. The result is a concentrated regulatory approach that is tailored to the individual plant deficiencies.

Question: To what extent are your tailored inspection plans different from your normal inspection procedures?

Answer: The specific inspection, enforcement, or regulatory actions outlined in a tailored inspection plan are designed to address particular problems of non-compliance in an IRE plant. In order to overcome these problems of non-compliance, and to assure the production of wholesome product, it may be necessary to change the level of staffing in a plant, to increase the rate of product sampling, or to change the frequency, duration, or type of inspection routinely applied. The actions taken are fully within the scope of regulatory means available to FSIS.

Question: Don't you always enforce the regulations fully?

Answer: Yes, we do enforce the regulations fully. However, in some cases where there is a demonstrated history of compliance problems, it may be necessary to apply more than the normal resources to assure the production of safe and wholesome products.

Question: Four of the 14 marginal plants first placed under the Intensified Regulatory Enforcement program about a year ago are still involved. How long are marginal plants normally under this program?

Answer: The normal term of the IRE program is six months. This term may be shorter, if the plant demonstrates substantial compliance after a three-month mid-term review. However, the IRE term may be extended indefinitely beyond the six-month period, depending on compliance with the plan of action.

Question: If plants are failing to operate within acceptable regulatory bounds, how are you ensuring that the output of these plants is wholesome?

Answer: When a plant fails to maintain compliance, it has failed to carry out the agreement under which the grant of inspection was issued. In many cases, the breach in responsibility is not sufficiently serious to warrant immediate or summary suspension or withdrawal of inspection. USDA now will permit the plant to continue operating but under intensified regulatory efforts to ensure that the output is wholesome.

Question: Should consumers be concerned about products coming from plants under your IRE program, especially from those four plants that are still involved a year after being placed under this program?

Answer: To assure that such an operation is in compliance with the regulations, USDA is applying intensified inspection actions to monitor the plant's activities very closely. It is these tailored inspection plans that permit USDA to offer assurance that products are in compliance. USDA has chosen to take these actions in order that consumers may continue to have trust in the integrity of the mark of inspection.

MEAT AND POULTRY INSPECTION USER FEE

Question: User fees for meat and poultry inspection is not a new idea. In fact, I believe a fee for these services was instituted in 1948 but was repealed the following year. Can you fill me in on the history of that experiment and why it lasted only for one year?

Answer: In 1947, Congress passed Public Law 80-266 which transferred the cost of the meat inspection program from the taxpayer to the packer. Members of Congress who supported the law viewed it as a way to reduce government spending. Congress provided USDA with a five million dollar working capital fund. Firms were billed for their inspection costs and paid the Department of Agriculture. Fees were based on a "man-week" of inspection, with a charge of about $89 per man week. User fees were collected only for fiscal year 1948. On June 5, 1948, Congress passed Public Law 80-610 which transferred the cost of meat inspection back to the federal government, except for overtime and holiday work. The 1948 action was based on the public health nature of the program and concern about adverse economic impacts from reduced public confidence and the fee burden itself.

Question: How do you plan to assess fees?

Answer: FSIS has prepared an analysis of the factors which should affect the approaches to determining fees. This is now under review in the Department.

Question: What are your criteria for the method to be used to establish the fees?

Answer: There are three criteria. The first is equity: the fee system should be as equitable as possible to the different segments of the regulated industry. The institution of fees should not disrupt current competitive balance between meat and poultry producers, large and small plants, centrally located and remote plants, complex and minimally processed products, or domestic and imported products. The second criterion is efficiency: the system should be of minimal cost. The third criterion is accountability: the system must be based on easily verifiable data.

Question: To recover full program costs, how do you intend to charge for the less direct costs of laboratory testing, reviews of labels, plant equipment and facilities, foreign plants, and administrative costs?

Answer: These are among the details of the system approaches under analysis. I can tell you that these costs will be included with the direct inspection costs in establishing the level of fees to be levied against the various segments of the industry.

Question: How do you plan to treat the state inspection programs?

Answer: If the user-fee legislation is enacted, the 1986 grants to states would be reduced by one-third of what they would have been. The 1987 grants would be reduced by two-thirds. The 1988 grants to states would be eliminated.

Question: How many of the states do you expect to turn their program over to you as a result of Federal user fees?

Answer: At this time, we do not know. We know that many states consider it important to maintain an intrastate program; their current willingness to pay half the costs of such a program indicates this. Some states may elect to absorb the full costs of continuing their programs while others may enact similar fees to recover program costs.

Question: What will it cost to assume the state programs and who will pay that bill?

Answer: If FSIS were to take over all state programs, the estimated cost would be $25-30 million more than the cost of the present Grants program, plus one-time transition costs of about $3 million. Former state-inspected plants then would become federal plants, subject to FSIS' user-fees, and would pay for the increased Federal inspection costs.

Question: My home state of Mississippi operates a state inspection program for both red meat and poultry. Mississippi and the Federal Government equally share the cost of the inspection program, 50/50. How would an across the board user fee affect Mississippi's inspection activities?

Answer: We can not predict at this time how a state will react to our request to fully finance its inspection system itself. Some states may impose user fees to fund the current federal reimbursement share - for Mississippi, that share is estimated to be about $1.1 million in fiscal year 1986. Some may impose user fees to cover the entire cost of their program. Some states may elect to fund the program entirely through state appropriations, while others may choose to terminate their programs, relinquishing inspection to the Federal Government. Each state would respond according to its individual circumstances.

Question: Will the state have to pick up the entire cost of the program?

Answer: By 1988 all federal grants would be withdrawn.

Question: How will this proposal impact on imports and the export of American agriculture products; will it make it even more difficult to sell U.S. produces abroad?

Answer: Some foreign countries may have difficulty accepting a user fee on their exports to the U.S. It is possible that they may consider a similar fee or some other trade barrier on our exports to them, however, we will certainly strive to avoid this through negotiations.

Question: What will be the additional cost of administering the user fee program?

Answer: This is also under analysis. Efficiency of administration is one of the criteria on which the system would be based.

Question: How will it be paid?

Answer: Administrative costs will be included along with the direct inspection costs charged to the plant.

Question: Why are you establishing a system in which the receipts accrue to the general receipts of the Treasury rather than the more traditional funding method of a revolving fund for the use of the Agency?

Answer: The separation of the agency's appropriation from user fee receipts is to protect the integrity of the inspection program. If the agency is not dependent on user fees for the funding level of the program, it is less subject to industry-generated pressures to influence the inspection procedures.

Question: What type of reaction have you received from individuals, industry and consumers regarding the user fee issue?

Answer: Reactions to the proposal thus far have not been encouraging. However, many of the opinions expressed could be interpreted as self-serving without recognition of the current National budget situation.

GAO REPORT ON USER FEES

Question: You have proposed implementing across-the-board user fees over a three-year period to recover the full cost of agency operations by Fiscal Year 1988. In 1981, the General Accounting Office (GAO) analyzed FSIS services and concluded that "USDA's inspections of meat and poultry processing plant operations clearly provide broad public benefits; therefore, appropriations funding is appropriate" (as compared to being paid for through user fees). Do you disagree with GAO's findings?

Answer: Our user fee proposal is based on the rationale that the primary beneficiaries of the inspection system are the inspected establishments. Inspection ensures them the public confidence needed to provide a market for their products.

Question: What are your arguments for urging expansion of user fees when GAO has determined that these should not be instituted because the inspections provide broad public benefits?

Answer: It is our position that while the public certainly benefits from the work of the inspection program, the industry also receives very tangible benefits. Consumer confidence is essential to the industry and to its profits. They currently enjoy this confidence due, in great part, to the success of the inspection program. As the industry benefits financially from this government service, we hold that they should reimburse the government for its costs in providing the service.

AGRICULTURAL MARKETING SERVICE

QUESTIONS SUBMITTED BY SENATOR COCHRAN

INSPECTION INTEGRITY

Question: About 73 percent of the AMS funding is derived from fees charged to users now up from 54 percent in fiscal year 1981. You are asking for legislation that would provide an even greater share of the agency funding from user fees--up to 90 percent, in fact. To what extent do you feel that increased dependence on user fees for agency support might compromise your independence of services?

Answer: Our commodity grading programs have been operated on a fully user-fee basis, some since the 1920's, with no compromise of integrity or independence. Based on this experience, we feel that increased dependence on user fees for agency support will have no impact on our independence in furnishing services.

Question: What steps have been taken to ensure the integrity and independence of your grading services, and what additional effort is planned?

Answer: A Compliance staff, independent of the commodity grading services, was established in 1984 to assure adequate and effective compliance with enabling laws and governing regulations. In addition, each commodity division is establishing or has recently established a review and evaluation staff to assure the integrity and independence of its grading services.

Question: What impact will fluctuating demand for services have on the agency when 90 percent of the funding comes from user fees? Have you done any analyses regarding how much the demand for your services might fluctuate throughout the year, as well as over a period of years?

Answer: Currently, we are approximately 75 percent user-fee funded. Our managers have developed considerable experience adjusting program activities to meet changing demand. We have managed our programs sufficiently well to assure that minor fluctuations in demand can be quickly adapted to without impairing program delivery. We do not expect any additional problems resulting from fluctuating demand once we are 90 percent user funded.

Question: How much pressure do you now feel to alter your programs to meet changing demands of serviced industries?

Answer: A user-fee program keeps constant pressure on managers to adjust programs to industry changes. We look upon this as a positive influence because we have to be able to change and make adjustments on a timely basis in order to stay efficient and solvent.

Question: Could responding to changing needs of the industries possibly lead to a program that only services the largest, most influential users? How do you plan to serve all people if you are responding to industry demands (probably influenced by the largest producers)?

Answer: Our services are available to all segments of industry on a voluntary basis. We will respond to both the changing needs of industry and service requests from small users.

USER FEES

Question: What has been the general response from serviced industries when you have determined that they are the principal beneficiaries of your services instead of the general public, so should, therefore, be charged user fees?

Answer: While, in ~~general~~, the industries identified for user fees do not relish additional business costs, they recognize the value of our services to them and are usually willing to provide the financial support needed to maintain our services.

Question: You carefully pointed out in your prepared statement that user fees only contributed 3/100 of one percent to consumer spending on meat, fruits, and vegetables, dairy products, poultry and eggs. This was obviously based on the costs of your services as a percentage of total consumer spending. Have you done any analysis to see if this is indeed the cost that gets added to consumers' bills, however, or if costs actually go up more than this?

Answer: Unfortunately, such an analysis would be extremely difficult to accomplish and we have not attempted to do so. Nonetheless, the cost of our service is extremely small in comparison to consumer spending.

Question: You are proposing legislative changes to allow user fees to be charged to recover the entire cost of collecting, analyzing, and disseminating market news information. USDA has considered the feasibility of charging for market news reports several times over the past decade, and has even proposed legislation toward this end. There has always been a variety of reasons why user fees should NOT be initiated, however. Why, then, are you proposing initiation of fees now? Have conditions changed recently?

Answer: Past proposals for legislative changes have included proposals for charging fees only for the postage, printing, and handling of printed market news reports. The fiscal year 1986 budget includes a proposal to collect fees to fund all market news activities. This shift in funding from appropriations to user fees is a continuation of our efforts to assist in reducing government spending by properly charging the cost of our services to direct beneficiaries.

Question: You have started charging for printed market reports because there are specific costs that can be readily identified with individual users. On what basis are you proposing to broaden your fees to recover other collection, analysis, and dissemination costs when specific costs are not as easily identified with individual users? How will you be charging for services to radio, television, or automatic telephone answering devices?

Answer: We believe that all recipients of our Market News information benefit from our services. Under the proposed user fee legislation for market news, fees would be charged to first handlers to recover the entire cost of the program for all commodities. The funds collected will support all market news reports, including those disseminated through radio, television, and automatic telephone answering machines.

Question: You indicated last year that there was a decline in the number of subscribers when you started charging for your market reports ... partially because the information was already available in a more timely manner from other sources. If you are proposing to broaden your charges to include all media, including the more timely media, would you anticipate any decline in subscribers as fees are initiated? Would there be other sources for the information you would be providing?

Answer: Under the proposed legislation, no decline in the number of subscribers is anticipated; however, there may be some pressure to reduce the number of reports or the frequency with which reports are released in order to reduce costs.

While USDA provides the most comprehensive market information, there are various other private sources of specific information.

LEVEL OF IMPORTANCE ATTACHED TO AMS STANDARDS

Question: It seems to me that supermarkets don't mention the USDA grades as much or as prominently as they used to. How important are the grades and standards to consumers today? Do they depend on these and look for these as they shop?

Answer: We believe the USDA grades and standards continue to play an important role in wholesale marketing and in providing consumers with important quality guides for making purchase decisions. To our knowledge, there have been no studies on the frequency or intensity of supermarkets advertising USDA-graded products, but the volume of USDA-graded products has remained rather constant over the past several years.

Question: Approximately what percentage of the producers/marketers utilize AMS grading and certification services today?

Answer: The percentage varies among the commodities from a low of 20 percent of shell egg packing firms to a high of 97 percent of all cotton producers.

Question: About what percentage of the commodities moving through the markets today bear AMS grades or certification?

Answer: The percentage varies among the commodities as follows:

Commodity	Percent Graded or Certified (FY 1984 est.)
Shell eggs	40
Broilers	75
Turkeys	90
Tobacco	95
Cotton	97
Beef	55
Lamb	87
Veal and Calf	9
Fresh vegetables	47
Processed vegetables	30
Butter	60

Question: Have any analyses been done to determine what increases in user fees might have on the voluntary use of your services? Can the industry get along without you?

Answer: Although we have not performed such an analyses we feel confident that the proposed increase in user fees will have minimal impact since the proposed increases are relatively small. We believe that industry needs our standardization and grading programs and will continue to request the services. Our standards have often been called the language of commerce, and grading provides an unbiased third-party assurance of quality which facilitates trading and builds consumer confidence.

MARKETING ORDERS

Question: How do marketing orders fit into the emphasis now being given to developing a market-oriented agriculture?

Answer: Marketing orders bring the processors and farmers together in a mutual effort to develop effective marketing strategies for their products. We have separate marketing orders for fruit and vegetable and dairy products.

There are several types of fruit and vegetable marketing orders: those that regulate quality, those that regulate quantity, those that provide standardization of containers or packs and those that permit research, development, and promotion projects. All marketing orders provide a mechanism by which detailed statistics and shipping information are collected and summarized for the benefit of the entire industry. In 1981, all types of fruit and vegetable marketing orders were reviewed along with other Federal regulatory programs by the Vice President's Task Force on Regulatory Relief. The Department of Agriculture also evaluated the economic impact of marketing order programs. That evaluation led to the conclusion that these programs have the potential to stabilize prices and supplies, but that some of them may impose inefficiency in the production and marketing system. The Department then developed and issued specific guidelines to be applied to such marketing orders on a case by case basis to ensure that production and marketing inefficiencies are minimized and eliminated as necessary.

Federal milk marketing orders are a self-help marketing tool that the dairy industry can use to promote orderly marketing conditions in fluid milk markets. The milk order program is a voluntary program, and orders are instituted or amended only on request by the industry through the public hearing process and after approval in a producer referendum. In addition, an order must be terminated at the request of a majority of producers supplying the market or when the order is no longer carrying out the purposes of the law authorizing milk orders. The Federal milk order program operates with a minimum of government control. Milk orders do not regulate from whom a milk dealer may buy milk, to whom he shall sell it, how much he should buy or sell, or at what price he may sell. Also, Federal milk orders cannot be used to limit or prohibit the marketing of milk through quota or other types of supply management programs.

Question: I know there have been people here in Washington in recent days lobbying both for and against government-controlled market access. What have been the major arguments, both pro and con?

Answer: Proponents of marketing order programs believe the programs promote orderly marketing and improve returns to growers. A stable marketplace benefits consumers by providing an even supply of quality produce at reasonable prices. Poor quality produce depresses prices to all growers and undermines consumer confidence. Extreme peaks and valleys in supply lead to extreme price fiuctuations. Production and marketing research and development programs can lead to the solution of marketing problems which individuals within the industry would not have the resources to carry out alone.
The opponents of marketing order programs state that these programs maintain artificially high prices and unreasonably limit the marketing decisions of individual growers.

Question: Do marketing orders sometimes place an unfair burden on small producers if they have to conform to standardized packaging, certain quality standards, or other restrictions? What options do growers have if they don't like certain restrictions?

Answer: Standards for quality and packaging do not impose an unfair burden on small producers. On the contrary, they may provide a means whereby small producers are able to enjoy marketing benefits otherwise available only to large producers such as the advantages which come from production and marketing research and development programs.

If growers and handlers are dissatisfied with certain aspects of an order, they can seek to amend or terminate the order.

Question: Currently, there are 47 Federal marketing orders which provide for private farm decisions (approved by the U.S. Department of Agriculture) to determine the marketing strategy of congressionally approved commodities (fruit, vegetable and specialty crops) with low Federal oversight costs. This contrasts with Federal government decisions on high cost Federal support for major U.S. crops (wheat, feed grains and cotton).

Given the present budget deficit concerns, has the Department of Agriculture given consideration to expanding the application of the

Federal marketing order concept in lieu of current support programs for farmers?

Answer: The Department of Agriculture is not currently considering expanding the application of marketing orders to commodities currently under support programs.

WHOLESALE MARKET DEVELOPMENT PROGRAM

Question: You have suggested elimination of the wholesale market development program. Do you feel marketing facilities and processes are at a point that further technical assistance and research will produce only marginal results, so cannot be justified?

Answer: According to the 1980 census, there are some 169 U.S. metropolitan areas with 100,000 or more persons. Over 70 wholesale market development studies have been conducted throughout the U.S. indicating that about half of the cities have been studied; new facility construction has occurred or is underway at 50 of these locations. All the technical work which needs to be done to establish or improve wholesale market facilities is readily available off the shelf. Because of the availability of this information, we feel that the private sector can easily assume this responsibility.

Question: Will private industry or the states be likely to continue your efforts in this area?

Answer: The value to the marketing chain of both new and updated wholesale marketing facilities has been demonstrated beyond question. With the off the shelf plans and studies that are available, we are confident that State and local governments or private industry will continue this effort.

PROMOTION PROGRAMS

Question: Many commodity groups have extensive generic product promotion campaigns, usually working through advertising agencies, I believe. Are you involved in all commodity group promotional activities, or do you have separate promotion programs?

Answer: The Agricultural Marketing Service provides oversight and direction as provided for in Federal legislation authorizing national promotion programs for cotton, potatoes. eggs, wheat and wheat foods, milk and dairy products, wool, and mohair. In addition, AMS provides oversight to advertising and promotion activities authorized for a number of fruits, vegetables, and specialty crops in connection with Federal market orders under the Agricultural Marketing Agreement Act of 1937.

Question: Exactly what is your role in providing oversight and direction to industry-funded promotion efforts?

Answer: It is our responsibility to coordinate the necessary steps under the Administrative Procedures Act to determine if producers favor the program being proposed. Public hearing sessions are held on a proposed order or amendment to an order to make recommendations on the final order. The final order is then the subject of a referendum vote of producers.

For programs which are approved in referendum, it is the responsibility of AMS to assure that the money collected is used for activities authorized in the legislation. AMS reviews and approves the budgets and projects proposed by the research and promotion boards; attends meetings of the boards; carries out procedures necessary to secure Board member nominations in order for selection by the Secretary of Agriculture; and provides legal assistance in compliance matters.

Question: If you have separate promotional activities of your own in collaboration with industry, what type of coordination is provided to ensure that efforts are not duplicated, and that efforts are mutually supportive?

Answer: AMS does not have any separate promotional activities.

PAYMENTS TO STATES

Question: You mentioned in your prepared introductory statement that an instrument to measure trash content during cotton grading is under development. Will your plan to eliminate the payments to states program affect the development of this instrument?

Answer: No. This project is not being funded under the payments to states program, but is being financed by user fees under the cotton classing program.

Question: What types of projects have been supported with this program? Have there been significant results?

Answer: This program has included projects on: electronic marketing, market expansion for specific products, maintaining and improving product quality, reducing marketing costs and other similar efforts to improve agricultural market efficiency. The program has been underway since 1948, and has made a number of significant achievements, such as the current privately operated system for electronic marketing of lambs, creation of export marketing information data banks, direct marketing of agricultural products, aquaculture, and improved market news dissemination.

Question: What will be the likely impact of elimination of this program? Will projects be terminated in mid-stream? Will States or industry continue the work even without shared funding from the Federal level?

Answer: The elimination of this program is not likely to result in immediate or abrupt reaction except from those States with projects that have been proposed but not yet approved for funding. Projects are funded on an annual basis and few multi-year commitments have been made. Most current projects are scheduled to be completed by the end of the fiscal year. While there is no provision to offset the loss of Federal funds or replace the Federal coordination, it is expected that States will be able to continue to fund those programs on which they place sufficiently high priority.

SECTION 32

Question: You show a significant increase in projected transfers to the Food and Nutrition Service for Child Nutrition Programs in fiscal year 1986. I assume this increase is because estimates of fiscal year 1986 customs receipts are significantly higher than in previous years. How was this amount established? Why is more expected in fiscal year 1986 than in the previous two years?

Answer: Legislation provides for Section 32 to receive 30 percent of the gross customs receipts during a calendar year. The fiscal year 1986 funding for this program is based on calendar year 1984 customs receipts which were higher than the previous year. Consequently, more funding is available for this program.

Question: The Food and Nutrition Service has proposed a number of program changes that would in effect reduce the total subsidy required for school lunch and other feeding programs. What analysis has been done to determine if they can use the level of donated commodities that you are proposing and also the cash transfer level? Is the cash transfer level a fixed percentage of the customs receipts, or is there flexibility? Can the funds be used for purposes other than child nutrition programs?

Answer: The amount for Section 32 commodity procurement shown in the budget represents the amount of commodities requested by FNS for the Child Nutrition Program during fiscal year 1986. AMS and FNS meet frequently to coordinate commodity purchases.

The cash transfer is a means of using Section 32 funds to finance Child Nutrition Programs instead of requesting additional appropriations in the Child Nutrition Program. The cash transfer level is not a fixed percentage of customs receipts. Funds can be used for purposes other than child nutrition. The Section 32 law states that the funds can be used to encourage the exportation of agricultural commodities and products, to encourage the domestic consumption of such commodities or products, and to reestablish farmers' purchasing power.

Question: There are various programs of the department that are concerned with removing surplus commodities or otherwise adjusting the supplies of commodities on the market. How is your Section 32 program different from some of the other activities, and how are your efforts coordinated with the other agencies/other programs?

Answer: The AMS Section 32 appropriation predominately removes perishable agricultural commodities from the market. The programs of the Agricultural Stabilization and Conservation Service are designed to assist the basic non-perishable commodities. The Food and Nutrition Service coordinates donation of commodities, both perishable and non-perishable for use in domestic feeding programs.

Question: You have suggested that the need for funds for emergency surplus removal purchases is not presently anticipated for fiscal year 1986. How have you arrived at this conclusion? Is it because you have carried over unobligated funds sufficient to cover any need you now envision?

Answer: Yes. We estimate that the carryout balance will be sufficient to cover emergency surplus removal in fiscal year 1986. Until an emergency surplus condition occurs, we do not know what kind or quantities of commodities will need to be purchased. Therefore, we use the carryout balance as a reserve for possible emergency surplus needs.

FISH AND FISH PRODUCTS

On November 14, 1984, the President signed Public Law 98-623, which incorporated fish and fish products as an agricultural commodity in the Department of Agriculture and made fish and fish products eligible for Commodity Credit Corporation loans, agricultural trade development and assistance, and Food for Peace exports. Estimates are that the United States has 20 percent of the world's fishery resources within 200 miles of its coast, yet the U.S. has had a trade deficit in fish and fish products for over 35 years. In 1983, the trade deficit in fishery products was $4.1 billion, or approximately 14 percent of the total U.S. merchandise trade deficit.

The Department of Commerce and the National Marine Fisheries Service have for some years had a small fishery development and promotion effort. The recently enacted Department of Agriculture role in fisheries development and promotion is in addition to the existing programs. The Department of Agriculture opposed the legislation.

Question: What steps has the Department of Agriculture taken or planned to take to implement the new legislative mandate for fisheries?

Answer: All members of the U.S. fishing industry are now eligible to participate in the GSM 102 Credit Guarantee Program. The Export Credits staff of the Foreign Agricultural Service has spoken before and is meeting with members of the fish industry to inform them of details of the Department's export credit programs. Members of the industry have been encouraged to submit specific requests for GSM 102 financing. To date, however, the Department has received no requests for GSM 102 assistance from U.S. industry or importing country officials. In addition, USDA is examining the legal steps necessary to include fishery products in the P.L. 480 Program and plans to pursue this avenue in cooperation with the National Oceanic and Atmospheric Administration of the Department of Commerce following signing of a memorandum of understanding.

Question: Has the Department of Agriculture moved to formally coordinate its programs and activities that can impact on the fishing industry with those fisheries-related programs and activities of the Department of Commerce and the National Marine Fisheries Service?

Answer: Yes. The Department of Commerce has requested, and USDA has agreed to sign, a memorandum of understanding to formally coordinate their export programs and activities which impact on the fishing industry. In addition, a staff member of the National Marine Fisheries Service has been temporarily detailed to FAS to obtain a better knowledge of FAS market development and Commodity Credit Corporation financing programs, improve our understanding of and programs related to the marine fishing industry, and to facilitate cooperation between the two agencies. Coordination is now taking place on a daily basis in the areas of participation in foreign trade shows, the exchange of trade data, and the establishment of a permanent liaison office between the agencies.

Question: What is the Department of Agriculture's estimate of the impact on personnel and funding resources, if any, of the new fisheries mandate on its other commodity development and promotion programs?

Answer: Since no requests for credit have yet been received, it is difficult to anticipate the potential size of the credit program for fish and fish products and the extent to which additional credit resources and staff may be required. The responsibility for marketing of marine fish products remains in the Department of Commerce. A marketing specialist within FAS currently handles export market development activities for fresh water fish.

AGRICULTURAL LABOR AFFAIRS OFFICE

Question: Please describe the specific activities in which the Agricultural Labor Affairs Office has been involved.

Answer: The Agricultural Labor Affairs Office was established in FY 1984 to advise the Secretary of Agriculture on issues relating to agricultural labor and to serve as a liaison with the Departments of Labor and Justice to assure that agricultural interests are adequately represented in matters relating to agricultural labor.

During fiscal year 1984 the Office of Agricultural Labor Affairs advised the Secretary on key agricultural issues such as immigration reform and control, adverse effect wage rates, and field sanitation. The Office also analyzed proposed rules and regulations and prepared Department comments on the proposals; closely monitored Congressional debates and developments surrounding the issues affecting agricultural labor; responded to all Congressional inquiries concerning the Immigration Reform and Control bills, and briefed the Secretary on matters relating to this legislative proposal; and represented the Department on the Interagency Task Force on Immigration and Refugee Policy which was made up of officials from the State Department, Department of Labor, Department of Health and Human Services, Office of Management and Budget, Immigration and Naturalization Service, and Department of Justice. This Office also initiated discussions with officials of the Employment and Training Administration (ETA), DOL, which resulted in: negotiations between ETA and the Statistical Research Service, USDA to develop a mutually satisfactory methodology for measuring annual changes in adverse effect wage rates; Agriculture's decision to reinstate the quarterly farm labor survey; and Labor's decision to consider using the survey data to calculate adverse effect wage rates beginning in calendar year 1986.

QUESTIONS SUBMITTED BY SENATOR HATFIELD

HOP MARKETING ORDER

Question: It is my understanding in conversations between USDA, my staff and representatives from the hop industry that a hop marketing order for 1985 would be forthcoming if the Friends of the Hops Marketing Order v. Block lawsuit was dropped and the hop industry submitted names of persons for the Hop Advisory Committee who were not closely associated with the Friends. Is that a correct understanding?

Answer: On December 21, 1984, USDA advised Peter Rooney, then Chairman of the Hop Administrative Committee, that USDA would not select any plaintiff in the Friends' suit nominated to serve on the Hop Advisory Committee for terms beginning January 1, 1985. In order to arrive at a slate of nominees which might be considered for selection by USDA, the industry was advised that persons closely associated with Friends would not be considered and that nomination meetings should be rescheduled and a new slate of names submitted to USDA for selection. The industry response was to seek concurrence of the plaintiffs and associates of the Friends organization for the dismissal of the lawsuit filed against the Secretary.

We have received periodic status reports on the efforts to dismiss the suit and have indicated to the industry that dismissal of the suit would be considered to be a very positive development. We now understand that the suit has been dismissed with prejudice as to all plaintiffs except one.

The status of the Friends litigation is unrelated to the issues under consideration in the formal rulemaking proceeding to amend the hop marketing order.

Question: As of this time, no Hop Advisory Committee has been established by USDA despite these assurances given by representatives of USDA. When will those names be forthcoming? Can you provide the Committee with a specific date? If not, why not?

Answer: We expect that by the end of March we will have selected the members and alternates to serve on the Hop Advisory Committee.

Question: Does the USDA still support the concept of a marketing order for the hop industry? What would such an order be required to contain to be acceptable to USDA? Is the current reluctance to put forward a marketing order in fact an attempt by USDA to eliminate that order? What tangible assurances can you give me that this is not the intent of USDA?

Answer: USDA supports the marketing order concept in general, however, all orders must be consistent with USDA guidelines and must be consistent with the policy of the Act in view of the contemporary economic circumstances in the affected industry. The hop marketing order does not conform to the requirements of the guidelines because it creates barriers to entry into the hop industry. Early last summer a formal rulemaking hearing was held to consider possible changes to the hop marketing order. That hearing resulted from proposals seeking various amendments to the order submitted by the Hop Advisory Committee and other interested persons. Extensive testimony was taken at that hearing, briefs were filed, and now USDA is preparing a recommended decision for publication in the Federal Register. The analysis of the rulemaking record is time consuming due to the divergence of views within the industry and the complexity of the issues. Reluctance on USDA's part is not a factor influencing the progress of the hop rulemaking proceeding.

Pending our resolution of the issues in this formal rulemaking, which must be based on the hearing record, we are unable to provide specific answers to your questions regarding the outcome of the rulemaking proceeding and the type of order provisions that may be adopted. To do otherwise would suggest prejudgement on our part and could violate the ex parte communications restrictions applicable to formal rulemaking proceedings.

QUESTIONS SUBMITTED BY SENATOR KASTEN

Market News User Fees

Question: One of the Administration's many user fee proposals involves market news activities. The Administration proposes to collect $14.2 million in fees for this information service.

It seems to me that this is a little like charging user fees for the provision of the Commerce Department's leading economic indicators or the Labor Department's report on the monthly unemployment rate.

How does the Administration propose to administer the collection of these fees?

Answer: Under the proposed user fee legislation for market news, fees would be assessed to the first handlers for the various commodities to recover the entire cost of the program. Examples of first handlers include cotton gins, poultry slaughtering plants, shell egg packing and breaking plants, and tobacco auction warehouse firms.

Question: Given the small amount of money involved, isn't this idea more trouble than it is worth?

Answer: While this $14.2 million reduction in government spending resulting from the transfer of the market news program from appropriated funds to user fees may not represent a significant reduction in the overall federal deficit, it reflects a continuing effort by AMS to assist the Administration in reducing government spending and implementing user fees where appropriate.

QUESTIONS SUBMITTED BY SENATOR DECONCINI

MARKETING ORDERS

Question: The Agricultural Marketing Agreement Act allows growers to petition the Secretary for a variety of self-help marketing tools - grade and standard regulations, research and promotion, volume regulations, reserve pools and combinations of the above.

Do you have any concerns with the growers deciding to use any of these marketing tools?

Answer: I support the general concept of these marketing tools as authorized under the Agricultural Marketing Agreement Act of 1937. However, as with any form of regulation, these tools must be tailored to meet contemporary needs of growers, handlers, and consumers and current market circumstances. In this vein, the authorities currently being used by the 47 marketing orders for fruits, vegetables, and specialty crops range from market research and development provisions, which have only an indirect impact on marketing, to prorate and producer allocation provisions, which directly interfere with the marketing of the commodity. In recent years, volume control provisions such as these have become more controversial as their benefits and disadvantages have been subjected to closer evaluation. There is evidence that some of these programs have caused the misallocation of resources and have deprived growers of the freedom to produce and market crops as they see fit in their judgment as businessmen. Therefore, USDA will continue to carefully scrutinize these restrictions in order to determine whether they do the farmer and the consumer more harm than good, and will seek to change them when it is determined that the disadvantages exceed the benefits.

Question: Are you a strong supporter of growers being allowed to use these cooperative self-help marketing programs?

Answer: I have instructed my staff to review all marketing order actions to insure that they are consistent with the enabling act, the marketing order authorities, and the administrative guidelines which apply to marketing orders covering fruits, vegetables, and specialty crops. I support use of marketing orders to promote orderly marketing conditions to the extent that their use can be established as necessary and can be demonstrated to be beneficial to growers and consumers alike. Consistent with the enabling statute and the Department's policy, we will administer these programs equitably. However, the need to regulate will continue to be the threshold question that marketing order committees must address and demonstrate as a condition precedent to the use of this authority.

Question: Don't these programs give farmers needed leverage in the marketplace?

Answer: Marketing orders do provide growers with leverage in the marketplace by permitting growers to work together to solve marketing problems. Also, economic studies have concluded that marketing orders can stabilize supplies and prices. However, these studies also indicate that some orders may impose inefficiencies on the production and marketing system. We are working with the affected industries to mitigate or eliminate these inefficiencies.

Question: The growers have informed me that while the Department has stated in public its general support of marketing order programs, including reserve and volume controls, it has been rumored that in private a different tune is being sung: Have you ever privately expressed opposition or reluctance to allow these programs to function in accordance with the recommendations of the growers?

Answer: My position on marketing orders is no different than that of the Administration; that is, I generally support the concept of marketing orders but believe that overall government interference and regulation of the American people must be drastically reduced. With regard to specific marketing order programs, I believe that constraints should be reduced where possible in order to rely more fully on free market forces.

Question: As you know, the Department has developed over the years - in consultation with industry - standards for the review of requests for the use of marketing orders.

It is generally believed that this review process was in most cases fair and equitable. However, in 1981, the Vice President's Regulatory Reform Task Force targeted marketing orders for major overhaul or outright elimination. Undoubtedly this created a negative atmosphere at USDA. Will you administer these programs in a manner that ensures that ideological prejudices are not superimposed over fair administration?

Answer: We intend to carry out the Administration's goals of building flexibility into the administration of marketing orders in a fair and equitable manner. Consistent with the Administration's objectives, the Secretary will require some adjustments in programs that restrict entry, limit supply, or perpetuate over-supply of commodities. This intent has been communicated to the affected industries and some orders (for example, California-Arizona navel and Valencia orange orders) have been amended to increase marketing flexibilities.

Question: How do you envision your administration of these programs? Do you believe that the producers will be allowed to make their marketing decisions as provided by their orders?

Answer: We intend to administer the marketing order programs in a manner consistent with the Administration's goals, the applicable provisions of the statute, and the orders. We will continue to look to the industries and the committees under these orders for informed deliberations and recommendations for regulations. We will also continue to solicit consumer input through public rulemaking procedures. This input will be fully evaluated by USDA before committee recommendations are approved. It is important to note that what is involved here is a delegation of authority to these industry committees, subject (as specified by Congress) to the oversight and approval of the Secretary of Agriculture. Not all producers and handlers favor every committee recommendation, therefore, the Department's role in this process is of the utmost importance.

SUBCOMMITTEE RECESS

Senator COCHRAN. The next meeting of the subcommittee is going to be on next Tuesday, March 26, in this same room at 10 a.m. We will be hearing from representatives of the Farmers Home Administration and the Farm Credit Administration. Until then, the hearing is in recess.

[Whereupon, at 11:40 a.m., Tuesday, March 19, the subcommittee was recessed, to reconvene at 10 a.m., Tuesday, March 26.]

AGRICULTURE, RURAL DEVELOPMENT, AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 1986

TUESDAY, MARCH 26, 1985

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, DC.

The subcommittee met at 10 a.m., in room SD–124, Dirksen Senate Office Building, Hon. Thad Cochran (chairman) presiding.

Present: Senators Cochran, Andrews, Harkin, Stennis, Sasser, Bumpers, Kasten, and McClure.

DEPARTMENT OF AGRICULTURE

FARMERS HOME ADMINISTRATION

STATEMENTS OF:

FRANK W. NAYLOR, UNDER SECRETARY, SMALL COMMUNITY AND RURAL DEVELOPMENT

DWIGHT O. CALHOUN, ACTING ASSOCIATE ADMINISTRATOR, FARMERS HOME ADMINISTRATION

ACCOMPANIED BY ROBERT SHERMAN, BUDGET OFFICER, DEPARTMENT OF AGRICULTURE

OPENING REMARKS

Senator COCHRAN. The subcommittee will please come to order. This morning the Subcommittee on Agriculture, Rural Development and Related Agencies will hear from officials of the Farmers Home Administration and the Farm Credit Administration.

AGRICULTURAL CREDIT

Farmers Home administers a wide range of loan and grant programs which support agriculture, rural housing, and rural community development. The Farm Credit Administration does not receive any direct Federal support, but through its production credit associations, Federal Land Banks, and Banks for Cooperatives, it has been one of the largest sources of agricultural credit.

The magnitude of the programs of these two agencies reflects the massive changes that have occurred in the past few years in farming and in the rural areas of our Nation. For example, the farm credit system had $78 billion in loans outstanding by the end of 1984, and the

Farmers Home portfolio was in excess of 1.9 million loans with principal indebtedness of more than $60 billion in 1984.

FARM CREDIT CRISIS

There has been, of course, a great deal of attention focused on the so-called farm credit crisis this year, and Congress has been wrestling with that issue since we convened in January.

The Senate passed Senate Resolution 79, which is a recitation of the views of the Senate with respect to the obligations of the administration in making available sufficient credit, through the Farmers Home Administration, to eligible and qualified borrowers. This resolution also indicates the sentiment of the Senate that the President's Debt Adjustment Program, which was announced in September 1984 and then revived in February, should be fully implemented.

We hope the witnesses this morning will give the committee some indication of their views of the status of the farm credit crisis, what the outlook is for the near-term, and whether or not there will be any need for this committee to report out any supplemental appropriation to help carry out the terms of S. Res. 79.

AGENCY WITNESSES

We welcome to the subcommittee the Under Secretary of Agriculture, Frank Naylor, who is accompanied by Dwight Calhoun, Acting Associate Administrator of the Farmers Home Administration.

We also have with us this morning Donald E. Wilkinson, the Governor of the Farm Credit Administration. We appreciate your being here.

Before we proceed to receive your statement, Mr. Secretary, I would like to recognize Senator Stennis and other Senators for any comments they may have before we begin hearing our testimony.

Senator STENNIS. Mr. Chairman, I thank you very much. I feel that I can express my interest better right now by yielding back to you for such procedures that you may adopt, for the benefit of all of us. I do have a few questions later.

Senator COCHRAN. Thank you, Senator. Senator Andrews.

FARM OPERATING LOANS

Senator ANDREWS. Thank you, Senator. I appreciate this opportunity to commend Mr. Naylor and others in Farmers Home for their action in moving funds to the field since our discussion over the nomination of Mr. Meese. Forty-eight hours into that discussion, it was found by the Administration that we could move moneys into the field, and in the case of North Dakota, where we were short of funds, we have received $34 million since that point in time, and we expect to receive an additional $18 million very soon.

We understand it is going to eliminate the backlogged demand. But we hear, Mr. Chairman, and I am sure it is true in Mississippi and Iowa as well, that new loan applications are piling up by 2 million a day.

Since the additional moneys that States like North Dakota have been receiving have been coming as a result of transfer authorities within the farm programs, I think the key thing that we would like to have you address, and you might answer it as a simple yes or no, does Farmers Home Administration have adequate funds on hand to continue transferring within farm programs, or do you need additional authority from this committee to transfer between programs in Farmers Home jurisdiction?

In other words, do you have sufficient authority to carry out this commitment to make sure that all farmers who are qualified for operating loans are covered? Is that going to be able to be handled?

Mr. NAYLOR. Yes, Senator, it is. We are or will transfer appropriate funds to meet the lending requirements for operating loans.

Senator ANDREWS. That, of course, is good news, Mr. Chairman.

ACQUIRED PROPERTY

One other short question: Given the state of the agricultural economy, Farmers Home borrowers, as you know, must, with the rest of the agricultural economy, suffer distress and sometimes default. If a farmer defaults and there is no hope of the farmer ever getting back to a position of financial health, what action does Farmers Home take with the loan and the collateral?

Do you hold the acquired property? Do you sell it as soon as possible? If you go sell it, are there any conditions attached to it? This is important, because if you sell it as soon as possible, you further depress the farmland market, and you raise hog with the equity of other farmers and their financial statements in the field.

What kind of a policy have you developed, Mr. Naylor?

Mr. NAYLOR. Senator, our policy is to withhold properties from the market in areas where the market is not stable. Frankly, this includes most of the Midwest at this point in time.

We are very conscious of the risk of disrupting the marketplace further or depressing land prices as a result of false signals sent by excess sales. While we do not have a large number of properties in our inventory, we do feel it is appropriate to set the example and not put those on the market when it would further depress land values in an area.

Senator ANDREWS. Have you explored, with the Department of Agriculture, the possibility of putting these lands into some type of soil bank, set aside, whatever else?

Mr. NAYLOR. We have not specifically discussed that. The interest of the farm organizations and others has been whether or not we can lease back some of these properties to their former owners if they were good managers.

We can do either. We can withhold the property from the market or we can put it under a caretaker arrangement. We can also lease it back to the former owner under certain conditions or to other operators to continue its use if it is good land.

Senator ANDREWS. But given the surplus and the problem we have with it, many farmers are beginning to think that this is an ideal way to deal with the problem. In the case of the neighbor who has lost his machinery and can't continue to farm that land under a lease, it would make sense, rather than leasing it to other farmers or reselling it immediately, to look at the option of putting it into some type of wildlife bank program.

The pheasant population in my State, and I am sure the wild bird population in other States, has declined simply because we do not have ground cover anymore. Have you looked at the possibility of doing something along the line of a water bank for upland game?

Mr. NAYLOR. Frankly, Senator, we have not. We hold only a little over 2,000 properties nationally. We would not have much impact one way or the other on the preservation of such game.

While we have a few counties where we have multiple properties, we don't hold that much real estate nationally at the current time.

LOAN GUARANTEE PROGRAM

Senator ANDREWS. Is the Loan Guarantee Program being utilized well? We have only two of them in North Dakota, and I expect the same in my colleagues' States. Is that as much of a disappointment to you as it seems to be in our State?

Mr. NAYLOR. It has been a disappointment to us. I intend to discuss that at some length further, because I think we have been very successful this year in bringing operating credit to producers that are under financial stress.

However, the guarantee program, particularly the adjustment portion of it, has not moved the way we think it should have, considering what we believe to be very reasonable and favorable arrangements for the banking industry. After all, we consulted the banking industry during the process of bringing it on line.

I would add that the banking associations, particularly in Iowa, Nebraska, and Kansas, have made strong efforts to assure us in the last 10 days that they have decided to make ample use of the program. Our State directors have reported a substantial increase in requests for approval.

The bankers association in Iowa has reported to us that it has a substantial number of applications that are in preparation in the banks which are intended to be submitted to us this year. We are prepared to handle them should they be forthcoming.

That is encouraging to us and indicates the willingness on the part of the commercial banks to do the job that we think they should, and the responsibility that they have. If that is the case, we are prepared to provide the funds necessary to handle those requests when they do come in.

Senator ANDREWS. Well, Mr. Chairman, I have a letter from our North Dakota Bankers Association, telling of their conversation with their local Farmers Home director, the suggestions that they offered to make this program more viable, and their disappointment in the answer.

If I could include this, at this particular time, in the record? I invite your comments, Mr. Naylor, so we could have your further information on it as soon as possible. I would appreciate it very much.

Senator COCHRAN. That will be included in the record. Thank you, Senator.

Mr. NAYLOR. I am aware of the concerns of the North Dakota Bankers Association regarding FmHA's definition of family farm. I have reviewed a copy of a letter dated March 4, 1985, from Mr. Ralph Leet, North Dakota State Director, responding to the questions raised by Mr. Harry J. Argue, Executive Director, North Dakota Bankers Association, regarding FmHA's definition of family farm. I believe Mr. Leet's letter adequately responds to the North Dakota Bankers Association's concerns.

[The letters follow:]

LETTER FROM HARRY J. ARGUE, EXECUTIVE DIRECTOR, NORTH DAKOTA BANKERS ASSOCIATION

MARCH 19, 1985.

Hon. MARK ANDREWS,
U.S. Senator,
Washington, DC

Dear MARK: In discussing the farm credit situation at their most recent meeting, the North Dakota Bankers Association Executive Council expressed frustration in regard to Farmers Home Administration's definition of a "family farm" for a borrower to qualify for FmHA financing.

I related these concerns to State FmHA Director Ralph Leet with the hope that consideration might be given to at least a partial liberalization of these rules. I have enclosed a copy of his prompt response, in which I have to say we are disappointed.

NDBA fully understands and appreciates that the basic objective of Farmers Home Administration is to provide needed assistance to family-sized farms. However, It appears that the definitions are overly restrictive in today's real world. We believe it is possible for FmHA to be more flexible and reponsive than is presently the case. It almost appears that a farm currently meeting the standards either has no debt or is too small to support one household.

In particular, the North Dakota Bankers Association would like to see serious consideration given to a broadening of qualification standards for guaranteed loans, perhaps by doubling the acreage limit for an individual farmer to still qualify for FmHA assistance. With this approach, there would not be the potential of swinging the doors open on the direct program to a larger number of borrowers for whom the agency obviously does not have adequate resources.

NDBA would greatly appreciate whatever assistance you can provide to make FmHA's guidelines more reasonable for the benefit of a greater number of deserving farm borrowers.

Sincerely yours,

HARRY J. ARGUE, *Executive Director.*

LETTER FROM RALPH H. LEET, NORTH DAKOTA STATE DIRECTOR

MARCH 4, 1985.

Re: Family-size farms

Mr. HARRY J. ARGUE,
Executive Director,
Bismarck, ND

Dear Mr. ARGUE: Thank you for your letter of March 1. The Farmers Home Administration by law is restricted to finance only family-size farmers, except with our disaster emergency loans, and economic emergency loans while that program was still in force.

The county committee, which consists of 3 local farmers, has the responsibility of making the determination of the family farm status. Our regulations are broad and are used as a guide, but I repeat the *3 local farmers* on the county committee make the decision.

There is no way that we can stand on just acreage for a family-size farm because the sizes vary between areas of a county; between western North Dakota and eastern North Dakota; between types of enterprises such as cash grain, dairy or stock cows; type of land, hay, grassland, good quality or poor quality cropland; whether or not the land is irrigated makes a difference. So, there are many many variances considered in the size of family farms within counties, between counties, and between areas of the State.

The definition that we advise our county committees to use in their judgment is as follows: *If the farm in question is substantially larger than like farms in the area, then you should look at it carefully as it is most likely larger than a family-size farm.*

You understand that we compare dairy farms to dairy farms, cash grain farms to grain farms, diversified farms or combinations, et cetera. We think this is a fair and equitable guideline to follow so that we can be assured that we are in compliance with our mission as well as with the intent of the law.

We have to strongly resist adapting our definition to what a family-size farm is to the needs of some larger farmers who are in financial trouble. I certainly am not personally against larger farmers, but have to point out our program is based on loans to family-size farmers, and when a farmer is in the upper 15- to 20-percent size in the whole county, we have to question if we should be financing that operation.

I hope this answers your question as to the definition of a family farm.

Sincerely,

RALPH H. LEET, *State Director.*

SOIL CONSERVATION PRACTICES

Senator COCHRAN. Senator Harkin.

Senator HARKIN. Thank you very much, Mr. Chairman. If I could ask your indulgence, I too have an amendment pending in another subcommittee that I have to go to. I do have some questions.

I just have a couple, if I could propound them. The others I will just submit in writing.

Senator COCHRAN. You may proceed.

Senator HARKIN. Thank you, Mr. Chairman. Mr. Naylor, to follow up what my colleague from North Dakota was questioning, I think that the record will show that last year, when my colleague from Iowa, Congressman Evans, was first proposing that this land not be sold at that time, I was not alone, but others questioned you and perhaps even the Secretary, at that time, about taking this land and putting it into some kind of soil conservation practices. That was a year ago.

You are saying that you haven't even looked into it yet. The record will show that we asked that about a year ago, at least it was last summer sometime, on the House side in hearings. We were talking about, at that time, any land being taken over by Farmers Home ought to be put into some kind of grass or soil conserving practices.

You say it is not a lot. I know it is not a lot when you look at it in total. That is probably true, but I think it sure sends a good signal to farmers in the other areas around where that land might be.

If you can't lease it back, as Senator Andrews said, to the operator who is there, I would sure hope you will take a real hard look at putting it into some type of soil conserving practice.

Mr. NAYLOR. Senator, we have some of our properties in that status. We have evaluated this question because there is a substantial difference of opinion whether the land should be leased back, particularly if it can be leased back to the existing operator, or whether it should be taken out of production. We have been amenable to doing either.

We have attempted to be responsive to the needs of the community and to the individuals. We certainly have no objection to working with any of you along the lines that you are discussing. That option is certainly viable.

LOAN PROCESSING

Senator HARKIN. We have, on the operating loans in Iowa—we are told continually that they will be processed in a timely manner. I don't have the figures at my fingertips but I think that there are in the neighborhood of 3,000, give or take a few, operating loan requests pending in the Farmers Home office in Iowa at this time.

We are going to be in the fields in 3 weeks in Iowa. Can you process those 3,000?

Mr. NAYLOR. Yes, sir. We can process them and there will not be a funding problem. We do have substantial additional help on board in Iowa. We already have moved through a record volume of operating loans in Iowa this year. It is the same nationally.

As of the 25th of March, we have already completed processing on 35,000 loans. This is well ahead of any record that we have ever set in the Agency and reflects a substantial number of new borrowers which the commercial banks have been unwilling to carry. They have moved over to us for operating credit.

I believe that we will have funds out to your farmers in Iowa. We realize how critical that is. We will meet the needs on time.

NUMBER OF APPLICATIONS

Senator HARKIN. Just one last one: On the Guaranteed Loan Program. I am sure you don't read the Iowa papers but the recent announcement that the Secretary was encouraged by the response of the applications in Iowa met with some—well, I don't know what phrase to put on it—met with some astonishment, I guess, in Iowa.

I said there were about 700, that sticks in my mind, about 700 in Iowa that possibly, possibly would be submitted for approval. I don't know how you can say you are encouraged by that. As our banking superintendent said in Iowa, "That isn't even a rain drop in the ocean in Iowa."

I just wonder what county you were talking about? That is about what we could do in one county in Iowa. I don't want anyone to get the idea that 700 is really a massive amount in Iowa. It is almost nothing.

So I hope you are not telling us you are encouraged by the fact that there are about 700 to be submitted, and that is something that we can rest upon at that point in time.

Mr. NAYLOR. Senator, I think that we need to put that in perspective. First of all, the 700 applications was a report of a survey taken by the banks themselves. We had on a live television hookup the 350 banks attending their conference in Iowa. They felt that they had been unfairly criticized for not participating, and the 700 was their count of loan applications in that program. They expect it to rise to over 1,000. I think we need to keep in mind that they were talking about loans that would come under the Debt Adjustment Program, in which they would have to make concessions.

Senator HARKIN. Yes.

Mr. NAYLOR. In working with the unit banks in your State we have found that 2 to 10 loan applications will come in under that particular program.

The results of the survey they plan to submit, albeit, not a complete survey, indicate that they would anticipate an average of about two or three loan applications per bank, under the Debt Assistance Program. We expect that number to increase. Now, they will submit, and already have submitted, additional applications under the regular guarantee program. These are over and above the number that are submitted under the Debt Assistance Program. No concessions are required under the normal guarantee program.

I find that encouraging. It represents a significant contribution by the banks, and it is consistent with the projections they made earlier regarding participation in that particular part of our program.

Senator HARKIN. Lest you think I am always critical, I do want to say that I had a couple of meetings recently with banks that have closed in Iowa, and you have brought in some outside people from Farmers Home to work with the FDIC. That has moved ahead expeditiously.

Whatever was done, was done right. You ought to make a book on it, because there are going to be more banks to go under. I hope you can follow up on that in the future, because there are some more banks going under. Get Farmers Home working there with FDIC on those programs.

Mr. NAYLOR. We have had a good working relationship there, and we are continuing to try to enhance those relationships. I think you will find us working closely with those people and hopefully doing the kind of job we believe ought to be done.

Senator HARKIN. It is a good job out there. Mr. Chairman, thank you very much.

Senator COCHRAN. Thank you, Senator.

We have prepared statements from both Mr. Calhoun and Governor Wilkinson, which we will make a part of the record in full and invite any summary comments that you might have to make to the committee.

Mr. Secretary, if you have any other opening remarks that you would like to make, we invite you to proceed with those as well.

STATEMENT OF MR. NAYLOR

Mr. NAYLOR. Thank you, Mr. Chairman. Since we have already kind of entered into questions, we will just enter Mr. Calhoun's statement in the record. I would like to make a couple of observations, if I may.

We have monitored very closely the credit problems that are being experienced by producers today, and the responsibility that we share with the commercial banks and the cooperative Farm Credit System to meet those needs this year.

I think the record will show that we have moved in and utilized additional resources very carefully to provide timely operating credit. We are well into the lending season. With only 4 to 5 weeks left in the main part of the lending season, we have, through the 25th of March, made almost 36,000 operating loans through our direct program.

In addition, we have made almost 4,900 loans under our Farm Ownership Program. The Farm Operating Program is at record levels. The amount of funds committed already this year, through the 25th of March, is $1.64 billion. This is 192 percent of the same time a year ago. That is a record level.

I think it is indicative of the commitment of our employees under heavy stress and under a very difficult period, to be responsive to the needs of their community and the farmers and ranchers in their areas.

DEBT RESTRUCTURING

A very important component of that, Mr. Chairman, is the fact that under the Farmers Home Administration portion of the Debt Restructuring Program, we have completed over 25,000 debt restructurings already this year, and there are still about 6 weeks of the season left to run. We anticipate that we will process considerably more before we are done.

We have been very encouraged within the last 10 days to 2 weeks with the cooperation and activity of the commercial banking sector.

I think Governor Wilkinson will address some of their own activities in farm credit. There appears to be a significant upswing in the interest and activity by the commercial banking sector in using our guarantees to supplement and improve their ability to service their borrowers.

I think the end product will be that we will meet the operating credit needs of our operators, and that we will do so in an effective manner. Certainly, our own staff has worked very diligently to see that that is done and done on a timely basis.

We have been very pleased with the support that the Congress has given us. We have received enormous cooperation from the States and from private organizations in providing us additional resources to work with our own programs to get this very difficult task done.

We intend to monitor the use of our funds very closely. We will utilize appropriate transfer authorities on an as-needed basis to ensure that funds flow on a timely basis and are available to complete the lending season without any interruption and without problem.

Mr. Chairman, with those opening comments, in addition to our statements, we would be pleased to take any further questions that you and other members of the committee may have.

PREPARED STATEMENT

Senator COCHRAN. Thank you very much, Mr. Secretary. Those are reassuring comments, indeed. I am pleased to hear that the Department is moving to service the eligible borrowers under the Farmers Home Administration programs.

We will hear now from our witnesses. We do have prepared statements that are going to be a part of the record in full, so Mr. Calhoun, please proceed to make your presentation at this time to the committee. Then we will follow that with Mr. Wilkinson's presentation.

[The statement of Mr. Calhoun and a brief history of the Farmers Home Administration follow:]

STATEMENT OF DWIGHT O. CALHOUN

Mr. Chairman and Members of the Committee, I appreciate the opportunity to appear before you to discuss the budget request of the Farmers Home Administration for Fiscal Year 1986.

The Agency ended Fiscal Year 1984 with 1.5 million active borrowers, with insured and guaranteed loans outstanding totaling almost $65 billion. Next month, the Agency will observe the 50th anniversary of its farm credit programs. In that half-century, Farmers Home has approved 9.5 million loans and grants totaling more than $124 billion.

Many farmers, home owners and residents of rural communities, have benefited from those loans and grants over the years. We would like to point out, however, that the current outstanding portfolio is more than one-half the total Farmers Home lending over the last 50 years. What began as a helping, stabilizing effort in a time of National economic distress 50 years ago has gone far beyond those original expectations.

With the current resurgence of the National economy and the crucial need to reduce the National deficit, we believe it is both timely and necessary to redirect Farmers Home programs that currently provide long-term financing for real estate, production, and emergency loans to the farm operating loan programs and to those family size farmers and ranchers who are unable to obtain credit from private sector lending institutions, in other words, the very people for whom the programs were originally intended.

We further believe that the Federal Government cannot and should not continue to be a major source of credit for the Nation. That is a proper role for the private sector. This Budget reflects the continuing commitment of this Administration to reducing dependence on Federal Government credit.

BUDGET HIGHLIGHTS

Mr. Chairman, for the Fiscal Year 1986, we are requesting a total Budget of just under $3.8 billion. This amount will provide essential assistance to those in the most need while reassigning and redirecting our other resources in ways that will help reduce the huge Federal deficit.

We are all well aware that some farmers are in serious financial difficulty today. FmHA has provided essential assistance to farmers through increased lending for farm operating loans and an effectively administered policy on forebearance. Despite the difficult times, FmHA has been able to stay with most of its borrowers. Special assistance through loan deferral, rescheduling and reamortization was provided last year to over 33,000 FmHA borrowers. In order to provide further assistance both to FmHA borrowers and farmers with debts to other lenders, the President announced, last September, a comprehensive set of farm credit initiatives to provide immediate help for those with the worst problems.

These initiatives of debt set-asides, debt restructuring through loan guarantees and county level financial and management counseling services are underway. These initiatives were greatly expanded last month to make the program more flexible to meet the serious farm credit needs. We are confident that the program will meet the most pressing needs of the Nation's farmers.

Both the Farm Credit initiatives and the Budget proposals for FY 1986 reflect efforts to provide temporary credit assistance to borrowers who have a reasonable chance of graduation to private credit sources. We believe that increased use of loan guarantees, rather than direct loans, is the most effective means of achieving these credit assistance objectives. The FY 1986 Budget continues the shift to guaranteed lending. It provides for $3 billion in guaranteed operating loans and $400 million in insured operating loans. The insured loans will be used, when necessary, for servicing existing borrowers during the transition from direct to guaranteed loans.

No loan authority is sought for the emergency disaster loan program because no emergency loans are proposed to be made in areas where Federal Crop Insurance is available. Federal Crop Insurance is now available in virtually every county where basic commodities are grown. The Secretary will maintain the discretion to provide emergency credit to meet needs resulting from natural disasters whenever it is determined that, because of transitional problems attendant to the crop insurance program, assistance is insufficient to alleviate the economic emergency.

No other funding for programs previously funded under the Agricultural Credit Insurance Fund is being proposed.

Responsibility for providing new housing assistance for rural areas will be transferred to the Department of Housing and Urban Development. The Administration has proposed 50 percent of new assisted housing units will be allocated to rural areas beginning in FY 1988. FmHA will continue to provide service for the outstanding loans. The portfolio will, however, continue to incur costs mainly due to the subsidized interest rates on the outstanding loans.

We have included within the Rural Housing Insurance Fund, $30 million for the Section 502 insured single-family housing program. These funds will be used to finance essential repairs to existing FmHA financed houses. An additional $50 million is being proposed for subsidized units in servicing extensions to existing rural rental projects where needed. No other assistance is requested.

In the Rural Development Insurance Fund, the Budget provides $50 million for water and waste disposal loans primarily to existing borrowers to assist very low-income communities that are experiencing health and safety problems. For water and waste disposal grants, $25 million is included. This is the last year that we propose to provide loans and grants for this purpose. In the future, communities needing financial assistance will compete for funds from other government agencies. The Administration has also proposed that the rural share of HUD's Community Development Block Grant be increased from 30 to 40 percent.

With a reduced level of program activity, the Agency will have a diminished need for staff and administrative expenses. We have included $228 million for salaries and expenses for the new fiscal year, a reduction of $107 million from the current year.

The Agency anticipates a decrease of 3,650 staff years that will save substantial amounts. This will provide adequate staffing levels to service existing loans and to continue providing technical assistance to current borrowers. We have initiated extensive management improvements under the Presidential management initiatives. These improvements and other cost reductions will result in budget reductions. These improvements include the development of new cash management initiatives, enhanced computer and data communication technology, improved personnel management, and organizational streamlining.

We have also initiated some recent projects to augment our staff in the area of loan servicing, technical assistance for farmers and assistance in providing quicker loan application processing. Two of these initiatives, contracts with farm management specialists and credit counselors in our county offices and a pilot project to contract with approved lenders in a five-State area, were part of the President's farm credit initiatives announced last fall. These and other program servicing initiatives represent an effort to improve service to borrowers and assist our overburdened staff.

And now let me address the specifics of the Fiscal Year 1986 Budget proposals.

Farm Programs

For Fiscal Year 1986, we are requesting $3 billion in farm operating loan guarantee authority. This authority would be used to guarantee up to 70 percent, in most cases, of the amount loaned by cooperating private credit sources. A 5 percent fee will be charged on guarantee loans to help offset program costs to the Government. We will submit proposed legislation to change the individual loan limits for guaranteed operating loans from $400,000 to $200,000, the existing limits for the direct loan program.

To back up this guarantee program, we are requesting $400 million for direct farm operating loans. We feel that this level is needed for extreme hardship cases as we transfer our emphasis to the guaranteed loan program.

Funding for farm real estate loans, including the small special purpose loans for soil and water use and conservation, and Indian land acquisition loans are not proposed in the Fiscal Year 1986 Budget.

An appropriation of $1.48 billion is requested to reimburse the Agricultural Credit Insurance Fund for interest subsidies and losses incurred during Fiscal Year 1984. The principal element of this reimbursement is the amount by which the interest expenses paid by the Agency exceeded interest income accrued from our outstanding loans. Many of the outstanding loans made from this fund accrue interest at rates in effect as early as 1954, rates which are substantially below recent years' cost-of-money.

Rural Housing Programs

In our Fiscal Year 1986 Budget proposal, we have taken another step to help reduce Federal credit and curtail the Federal deficit. We are not requesting funding authority for new housing construction or development. We are, however, requesting a housing maintenance program of $80 million. Of this amount, $30 million will be used to provide for necessary repairs to existing FmHA financed housing in order to protect the Government's interest in the current housing portfolio. It is proposed that in the future the rural Federal housing assistance will be financed entirely by HUD.

The remaining $50 million will be used in our Section 521 rural rental assistance program to fund 4,550 units. These units will be used for extensions of expiring contracts and servicing of current FmHA financed projects where necessary. We plan to continue financing this program through 1987. After that time, all rental assistance for rural America will be met through the Federal programs of HUD or State and local sources of rental assistance.

While our program requests are modest, we are requesting an appropriation of $2.137 billion which is needed to reimburse the Rural Housing Insurance Fund for subsidies and losses incurred in Fiscal Year 1984. This request represents a 16 percent increase or $293 million more than last year, which further illustrates the costs we must pay for the subsidized housing programs.

Rural Community Development

For the community development programs, we are requesting $50 million for the water and waste disposal loan program and $25 million for the companion grant program, to be used on a 2-to-1 basis. We feel that this can meet urgent needs for water and/or waste disposal systems in very low-income communities who are experiencing health and safety problems.

No funds are being requested for the community facility loan program or the business and industry loan program. We feel that these programs address economic development which is beyond our essential mission and that the critical need to control the Federal deficit at this time requires that we limit our commitment in these areas.

An appropriation of $612 million is requested to reimburse the Rural Development Insurance Fund for interest subsidies and losses incurred during Fiscal Year 1984.

SALARIES AND EXPENSES

The 1986 appropriation request for Salaries and Expenses is $228 million. This is about $107 million below the adjusted appropriation estimated for Fiscal Year 1985. The Fiscal Year 1986 request includes a decrease of $92 million associated with a reduction of 3,650 in the staff-year ceiling, $12.2 million to reflect reduced pay, and a reduction of $6.8 million in administrative costs owing to management improvements under the Presidential management initiatives. The Fiscal Year 1986 request includes an increase of $3.8 million for inflation in non-pay areas.

The staff-year resources needed in 1986 have been decreased from the 1985 level because of the projected reduction in number of direct loans to be made in 1986. Although additional staff years will be needed to continue our loan servicing, debt collection, and credit counseling activities at the County Office level, this will be more than offset by a substantial reduction in staff years required to make direct loans. We expect the 8,750 staff years will be sufficient to service our current loan portfolio and process the loan programs proposed for Fiscal Year 1986.

The automation of our field office and the development of the new accounting system will continue in FY 1986. It will allow us to convert many of our manual operations to automated applications allowing the Agency to strengthen loan servicing activities. Installation of these computers is expected to begin in February 1986 and will be completed within two years of that date.

FmHA has just completed implementation of a concentration banking and electronic funds transfer disbursement system. By moving money electronically, this system will save the Government millions of dollars in interest expense and, at the same time, improve service to FmHA borrowers.

We appreciate the support which this Committee has always given us, and we look forward to discussing this Budget with you.

Mr. Chairman, this concludes my prepared testimony. Attached to the statement, as is customary, is a brief history of FmHA with charts and statistics which may be helpful to insert in the record. I will be happy to answer any questions. Thank you very much.

A Brief History of Farmers Home Administration

Farmers Home Administration (FmHA) is the credit agency for agriculture and rural development in the U.S. Department of Agriculture (USDA). Its history of financial and technical assistance, as a lender of last resort in rural America, goes back to the year 1935. In 1985, the agency will complete 50 years of service in rural assistance performed under the successive names of Resettlement Administration, Farm Security Administration, and Farmers Home Administration.

When it began in the 1930's, the agency's original function was to make loans and grants to Depression-stricken families and help them regain self-sufficiency in making their living on family farms.

Throughout its half-century of operation, FmHA has been concerned primarily with credit and counseling services that have supplemented resources of the private sector for building stronger family farms. In 1984, farm credit accounted for about one-half of all resources administered by FmHA.

In addition, during the last two decades, Congress has used FmHA's local offices to deliver other programs of benefit to families and communities throughout the rural population. Programs administered through FmHA have helped to bring rural housing, water and sewer systems, and other essential community facilities up to standard for rural people and have generated more development of job and economy boosting business and industry in rural areas.

FmHA has been a leading force in spreading the outreach of nongovernmental lending institutions into rural sectors that lacked access to such financial resources.

In the credit delivery system reaching to the county level that FmHA has developed over the years, approximately 10,850 permanent full-time employees are engaged in directing FmHA resources from the National Office in Washington, D.C., 46 State offices, 270 district offices, and about 1,945 county offices serving every rural county or parish in the 50 States plus the Pacific Trust Territory, American Samoa, Guam, Puerto Rico, and the Virgin Islands. FmHA's close one-on-one relationship with its borrowers is unique in the Federal Government.

FmHA's existing system of personal contact across the country has established it as a lead agency for rural development. Congress and the Administration continually recognize FmHA's long experience in serving rural communities and farm families and have over the years expanded old services and created new ones.

FmHA loans and grants supplement the amount of credit and capital directly available from commercial lenders in rural areas. In most programs, the agency makes loans to qualified applicants who can find no other sources of financing available on terms or conditions they can meet.

The money loaned by FmHA comes from collections on previous loans, or from private investors through sale of Government securities. In guaranteed loan making, funds are supplied directly to borrowers by commercial lenders, with FmHA minimizing the lender's risk.

Grants for rural water and waste disposal systems, farm labor housing, home repair for low-income elderly people, and "self-help" homebuilding by low-income families supplement the agency's rural lending program.

RESETTLEMENT ADMINISTRATION

The lineage of FmHA goes back to the Resettlement Administration, which was established by President Franklin D. Roosevelt as an independent agency on April 30, 1935. It was formally assigned to the Department of Agriculture in January 1937.

The programs of the Resettlement Administration offered a number of approaches to solving the problems of poor people and poor land. The most popular was the supervised loan program. Supervised loans were part of a Governmentwide effort to help needy rural people reestablish themselves on a self-supporting basis.

During its 2-year operation, the Resettlement Administration made more than 300,000 short-term loans, often supplemented by grants to low-income families. Each loan was based on a farm and home management plan worked out by county, farm, and home supervisors in cooperation with the borrowing family. The plans were designed to ensure the use of good farming practices and to fit the needs of the families taking part in the program.

By 1937, there was a growing conviction in USDA and in Congress that supervised credit as pioneered by the Resettlement Administration was the answer to a worsening national problem of hardship and failures among tenant farmers. On July 22, 1937, the Bankhead-Jones Farm Tenant Act was passed.

The Resettlement Administration was given the responsibility for the new program of supervised farm ownership loans with 40-year terms for farmers who lacked other sources of credit for buying their own land and for farm and home improvement.

Also enacted in 1937 was the Water Facilities Act to provide loans for individual and association farm water systems in 17 Western States where drought and water shortage were familiar hardships. The Resettlement Administration shared servicing responsibilities of the program with the Soil Conservation Service and the Bureau of Agricultural Economics. This act was the forerunner of the rural water programs now administered by FmHA.

FARM SECURITY ADMINISTRATION

As administrative actions were taken to carry out the Farm Tenant Act, on September 1, 1937, the Resettlement Administration was renamed the Farm Security Administration (FSA).

For the ensuing 9 years, FSA carried on supervised credit programs with farm and home counseling by county office staff. The success of a large percentage of these borrowers helped strengthen family farm agriculture and helped the Nation meet its awesome food-producing challenges in World War II. By 1941, the FSA had made more than 13,000 loans to tenant families for the purchase of farms.

In 1942, FSA was given full responsibility for the water facilities program in the 17 Western States.

FARMERS HOME ADMINISTRATION

By 1946, it was generally conceded both in and out of Congress and within the agency itself that a restructuring of FSA was necessary. Some old Resettlement programs were no longer justified, others could be improved, and new programs would be needed in the period following World War II.

Accordingly, in August 1946, Congress passed the Farmers Home Administration Act. This measure, which took effect in 1947, reconstituted FSA under the new name Farmers Home Administration.

Combined in the newly restructured agency were some programs of FSA and the emergency crop and feed loan program. The latter, a service in short-term loans (for feed, seed, and fertilizer) to farmers in designated hardship areas, had been originated through USDA in 1918, and carried on during 1933-46 through Production Credit Associations of the Farm Credit Administration's agricultural credit system.

The Farmers Home Administration Act also gave the agency new authority to insure loans made by banks, other agencies, and private individuals, as well as to make direct Government loans. The act brought an end to rural rehabilitation loans, of which over 3 million totaling over $1 billion had been made since 1935 by the Resettlement and Farm Security Administrations.

In its first 3 years, the Farmers Home Administration confined its operations to development of supervised farm ownership and farm operating loan programs, and to water facilities projects in the 17 Western States.

The agency was commonly known as "FHA" until April of 1974 when USDA formally adopted "FmHA" as the agency's abbreviation. This was done to easily distinguish Farmers Home Administration from other agencies having the same initials, such as the Federal Housing Administration and Federal Highway Administration.

EXPANSION OF FmHA SERVICES

The first of many additions to FmHA's portfolio of services, all made available to rural people through the well-established system of FmHA county offices, came in 1949.

The following are highlights of the Congressional acts from 1949 through 1984 (listed chronologically) that have molded FmHA's wide variety of services.

Title V of the Federal Housing Act of 1949 gave FmHA authority to make housing loans to farmers as a part of the national housing program. The major housing programs under this legislation are Section 502, single family housing; Section 504, single family housing repair and rehabilitation; and Section 515, rural rental housing.

The Disaster Loan Act of 1949 originated the special emergency farm loan for recovery from losses inflicted by natural disaster.

The Water Facilities Act was amended in 1954 to apply nationwide, rather than limited to the 17 Western States, and to let farm area water systems take on nonfarm customers in rural communities.

Rural development was given Federal program status by USDA administrative action in 1955. FmHA's first involvement was a pilot program of loans to small farmers who could not qualify for regular FmHA loans.

In 1959, FmHA began to make loans to local organizations covering the local share of cost in small watershed projects under Public Law 566.

Major overhauling and expansion of FmHA authorities came with passage of the Consolidated Farmers Home Administration Act of 1961. Its principal provisions were the following:

* Raised limits on farmer loans to $60,000 for farm ownership, replacing a formula whereby each county's limit had been the average value of its family farms and from $20,000 to $35,000 for farm operating purposes.

* Opened up the water system program to the general rural population, including incorporated towns of up to 2,500. The loan limit on a project (previously $250,000) was raised to $500,000 for a direct FmHA loan and to $1 million for an insured loan.

Also in 1961, the Federal Housing Act was amended to make nonfarm rural residents eligible for FmHA's direct housing loans. This new jurisdiction in rural housing extended to towns of up to 2,500 population.

Still more expansion of FmHA services came in 1962. The Senior Citizens Housing Act set up loans for low-rent apartment projects designed to meet the needs of people age 62 and over. This type housing was acutely lacking in rural communities.

Amendments to the Farmers Home Administration Act authorized loans for a shift in land use to outdoor recreational facilities built primarily to benefit rural people. The agency began to make loans to family farmers to set up farm-based recreation and other nonagricultural enterprises that would add to family income, and for association grazing ranges where family farmers and ranchers share the use of more grazing land for livestock production.

A pilot program for rural renewal, delegated to FmHA, launched experiments in several States to develop better community facilities, improve homesites and housing, and attract new industry to underdeveloped rural areas. Rural renewal was discontinued as an experimental program in 1969.

FmHA also was authorized in 1962 to make loans covering local project costs in areas designated for benefits of a resource, conservation, and development program which, like the small watershed program, is supervised by USDA's Soil Conservation Service.

The Economic Opportunity Act of 1964 established loans to low-income rural people for small farm improvements or nonfarm enterprises that would add to family income. FmHA performed the lending through its county offices with funds provided by the Office of Economic Opportunity until 1971. The agency made nearly 65,000 loans totaling $109.3 million to individuals and 1,476 loans totaling $21 million to cooperatives.

EXPANSION OF PROGRAMS TO PRESENT LEVELS

The expansion of old programs and enactment of new ones during the first 4 years of the 1960's raised FmHA's total loan and grant volume from the $300 million level of fiscal year 1960 to $750 million in fiscal year 1965.

In 1965, the water facilities loan program was transformed into a loan-and-grant program for both water and waste disposal systems. At the same time, rural towns of up to 5,500 were made eligible to be included in FmHA-financed projects, and the limit on FmHA financing of a project was raised to $4 million.

Rural housing was changed from a program of direct loans to one primarily of insured loans, and the population limit on towns served through FmHA was raised from 2,500 to 5,500. This opened the way for the greatly increased housing services for rural people.

In 1966, senior citizens and younger low-income families became eligible for FmHA rural housing loans or tenancy in rural rental housing.

In 1968, an overhauling of the Housing Act of 1949 established the interest-supplement housing loan program. It enabled some low-income families to pay as little as 1 percent interest and provided for subsidized loans to developers of low-priced rental housing for low-income families and senior citizens. New programs also were enacted in 1968 for rural homesite development loans and for grants toward support of "self-help" homebuilding group projects. Grants of up to 90 percent, as well as loans, were authorized for farm labor housing projects.

In 1968, Congress abolished a

statutory annual ceiling of $450 million on FmHA-insured loan authority for farm ownership and community facilities combined, and raised the national total authorization for water-waste disposal grants from $50 million to $100 million a year.

In 1970, legislation was passed to remove technical barriers to the use of investors' FmHA-insured funds, rather than direct appropriated funds, for loans to tax-exempt public bodies such as municipalities and public service districts. That year marked the beginning of a period of rapid growth and increased service to small towns.

The Housing Act of 1970 raised the population limit to 10,000 for a rural community where FmHA housing loans may be made.

In farm credit programs, the agency took action in 1970 to increase its cooperation with other lenders in jointly serving farm borrowers, with FmHA taking a second lien when the same security is mortgaged both for the FmHA and other lenders' loans. In 1971, the limit on a farm ownership loan secured by a mortgage on real estate was raised from $60,000 to $100,000.

The Rural Development Act of 1972, enacted August 20, 1972, gave USDA primary responsibility for Federal activities in support of rural development. It established the position of Assistant Secretary for Rural Development to coordinate this effort through the programs and expertise of FmHA, Rural Electrification Administration (REA), and the Rural Development Service (RDS). In 1977, RDS was merged with FmHA and in 1981 it was elevated to the Office of Rural Development Policy.

In its other principal provisions affecting FmHA, the act--

* Authorized FmHA to guarantee loans made by commercial lenders for farming, housing, and rural business and industry, including enterprises in cities of up to 50,000 population.

* Abolished the limit of $4 million per project on FmHA financing of water and waste disposal systems, increased the national grant authorization for water and waste disposal to $300 million a year, and raised the population limit on towns eligible for FmHA-financed systems to 10,000.

* Authorized FmHA loans for other kinds of essential community facilities such as fire departments, community halls, hospitals, nursing homes, and other related facilities.

* Authorized FmHA grants to improve rural industrial sites.

* Authorized area assistance planning grants.

* Authorized FmHA to make investor-funded insured loans for farm operating purposes, and raised the limit on a farm operating loan from $35,000 to $50,000.

* Authorized youth loans to rural young people under age 21 for farm or nonfarm income-producing enterprises supervised through schools or organizations, such as 4-H Club and Future Farmers of America programs.

* Set $225,000 as the maximum permissible debt against farm property on which FmHA and a cooperating lender may simultaneously hold liens. This enabled FmHA to participate in larger loans up to its limit of $100,000 to family farmers and ranchers.

The emergency loan program to

help farmers recover from natural disaster underwent a short-lived expansion in 1972. An act of Congress, stimulated by the Hurricane Agnes disaster in Northeastern States, liberalized emergency loan terms nationwide and decreed nonrepayment of the first $5,000 to cover actual loss. After the cost mounted to about $550 million within a few months, the program was suspended and Congress in 1973 returned emergency loans to a fully repayable basis. Legislation in 1975 established separate categories of disaster emergency loans to cover losses and to finance resumption of farm production operations. Under the Small Business Development Act of 1980, FmHA was given authority to make unsubsidized emergency loans to farmers who are able to get credit from commercial lenders. The law limits loans to these creditworthy borrowers for actual loss only.

A special Emergency Livestock Credit Act for FmHA's guarantee of commercial lenders' loans to livestock and poultry producers in financial distress was enacted July 25, 1974. The program expired September 30, 1979. Under terms of the program, FmHA guaranteed a maximum $350,000 worth of commercial credit for an eligible borrower. Loan guarantees totaling $1.5 billion of principal outstanding were authorized. About $1 billion of this credit was used by farmers and lenders.

Under amendment of the National Housing Act, passed in 1974, FmHA in 1976 introduced its housing loans into towns of 10,000 to 20,000 population that are outside Standard Metropolitan Statistical Areas (SMSA's)* and certified by the Secretaries of Agriculture and Housing and Urban Development (HUD) to be lacking in mortgage money from other sources. Later in 1976, Congress revised the criteria for serving the larger non-SMSA communities by specifying that consideration be based on shortage of mortgage loan funds for families of low and moderate income. Housing Act amendments of 1974 also authorized extension of FmHA housing loan services to U.S. island territories, including trust territories in the Pacific. (Service was initiated on Guam in 1976 and other islands in 1977.)

The guarantee of commercial lenders' housing loans to families of moderate income was implemented in January 1977 under authorities provided in the Housing and Rural Development Acts. However, under the Housing Act Amendments of 1977, guarantee of housing loans was limited to the service of families with above moderate income. In 1977, FmHA also implemented grants to senior citizens with very low income for repair of badly deficient houses, and an authority under housing legislation of 1974 to provide rental assistance supplementing rent paid by low-income tenants of FmHA-financed rental housing.

The Emergency Agricultural Credit Adjustment Act, enacted August 4, 1978, substantially changed the farm programs of FmHA and added a new program of economic emergency loans. The new program authorized FmHA to make or guarantee loans of up to $400,000 to farmers or ranchers hard pressed by shortages of credit from regular sources or by a cost-price squeeze. The agency is authorized to carry a maximum of $6 billion in economic emergency loans at any one time. The loans can be used to refinance certain outstanding debts, reorganize the farming operation, and pay other operating expenses. However, funds cannot be used to expand farming operations.

The 1978 Agriculture Credit Act also made changes in existing programs --

* Expanded eligibility for farm loans to family corporations, cooperatives, and partnerships, as well as individuals.

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*Name changed to Metropolitan Statistical Areas (MSA's) in 1984.

- Increased loan limits to $200,000 for insured and $300,000 for guaranteed farm real estate loans and to $100,000 for insured and $200,000 for guaranteed farm operating loans.

- The interest rate for farm ownership loans was changed to be based on the cost of borrowing to the Government. Special interest rates on ownership and operating loans were made available for limited-resource farmers.

- The interest rate for actual losses under disaster emergency loans also was set at 5 percent.

- The maximum allowable grant for water and waste disposal projects was increased from 50 percent to 75 percent.

- Revoked the requirement that the Department of Labor clear business and industrial loans of less than $1 million and when employment is less than 50 people.

Powerplant and Industrial Fuel Use Act of 1978 (Section 601) provided energy impact assistance grants to rural communities which faced problems of rapid growth due to new coal and uranium mining. This was sometimes referred to as the boomtown program. Grants were available for planning as well as acquiring and developing sites for housing and public facilities.

Energy impacted areas were designated by State governors and approved by the U.S. Department of Energy. By the end of 1981, approximately 400 grants had been awarded to communities within the designated 24 States. The program has not been funded since 1981.

The Rural Development Policy Act of 1980 gave USDA a leadership role in coordinating a nationwide rural development program. Among other provisions, it created the position of Under Secretary of Agriculture for Small Community and Rural Development and increased FmHA's annual authorization for Section 111 planning grants.

The planning grants under Section 111 had been authorized by the Rural Development Act of 1972. The grants were made to States, substate districts, local governments, and certain community-based organizations to encourage and help meet the cost of comprehensive planning in rural areas. Grants were used for planning a wide variety of services including water, sewer, housing, energy, and economic development. Through its final year of funding, fiscal year 1981, the Federal Government made 605 grants for a total of $19 million.

The Energy Security Act of 1980 was a $20 billion comprehensive synthetic fuel measure designed to spur the production of 500,000 barrels of synfuels daily by 1987 and 2 million barrels by 1992. Small-scale projects (less than 1 million gallons per year) with a loan amount of less than $1 million, and intermediate projects (over 1 million and less than 15 million gallons) became eligible for FmHA financing.

Although the 1978 Emergency Agricultural Credit Adjustment Act set May 15, 1980, as a date of expiration for the economic emergency loan program, the Agriculture and Food Act of 1981 extended authority for the program until September 30, 1982. In 1983, the U.S. District Court in Washington, D.C., directed FmHA to reopen its economic emergency loan program for a limited time, from December 22 through September 30, 1984.

The Rural Housing Amendments of 1983, enacted on November 30, created changes in the single family and multifamily housing programs of FmHA. The new legislation directed FmHA to give more priority to serving very-low-income households and making its housing assistance more affordable to low-income persons in rural areas. The law required that FmHA revise its income definitions to be consistent with HUD's and to also accept any of the voluntary national model building codes and HUD minimum property standards, in addition to the FmHA construction standards.

Other provisions of the law:

* Permit FmHA to extend single family home mortgages from 33 years up to 38 years to persons whose incomes do not exceed 60 percent of the area's median income.

* Authorize FmHA to make single family or multifamily housing loans for permanently sited mobile/manufactured housing units, including the lots on which they are located.

* Require not less than 40 percent of the homes financed nationally and 30 percent in each State under the section 502 (single family housing) program to be for very-low-income families.

* Authorize up to $10 million for innovative demonstrations of housing and building systems that may differ from FmHA minimum property standards, while still providing adequate housing for low-income borrowers.

* Establish a new program of housing preservation grants to eligible organizations and units of government to rehabilitate single and multifamily housing.

* Set a goal of January 1, 1984, for reciprocity between HUD, VA, or FmHA under which subdivisions approved by any of these agencies would be eligible for loans from any of the three agencies without further certification.

The Emergency Agricultural Credit Act of 1984, enacted April 10, 1984, significantly changed FmHA's farm operating and emergency loan programs.

In the emergency loan program, for disasters occurring after May 30, 1983, farmers in counties bordering designated counties are eligible to apply for emergency loans and the application period is extended from 6 months to 8 months. Collateral will be based on its value the day before the emergency designation was requested by the governor or its value 1 year before the request, whichever is higher.

In the operating loan program, loan limits on new loans were raised from $100,000 to $200,000 for insured loans and from $200,000 to $400,000 for guaranteed loans.

The maximum repayment period for rescheduled or consolidated emergency and operating loans increased from 7 to 15 years from the date of the original note. A loan which is rescheduled may be changed to a limited resource loan for a qualified borrower.

In the economic emergency program, which expired September 30, 1984, $310 million was to be used for insured loans and any unused portion of the $290 million slated for guaranteed loans could be used for insured loans.

Other changes in the law include:

* Interest rates on operating, farm ownership, or emergency loans that are deferred, consolidated, rescheduled or reamortized, to be set at the original rate or the current rate, whichever is lower.

* Requiring 20 percent of operating and farm ownership funds to be allotted to limited resource borrowers. States unable to meet the goal may use any remaining funds for regular operating loans.

* Prompt notification of borrowers of limited resource loans.

* Prohibiting FmHA employees involved in the loan review process from buying land for 3 years whenever another person has applied for and been denied an FmHA loan to buy the same land.

* Permitting a study on the feasibility of a program for delinquent farm borrowers to repay their loans with earnings from timber production on land diverted from crops or pasture.

Quotas of lending to very-low and low-income families for home ownership were clarified under a supplemental appropriations bill signed July 2, 1984, and the "Housing and Community Development Technical Amendments Act of 1984," signed October 17, 1984. The housing legislation of 1983 had restricted FmHA to making at least 40 percent of such loans to people of very low income. However, so few people in that category could afford to buy homes, even with the maximum interest credit available, that service to low-income people was severely restricted. The revisions enacted in 1984 authorized the agency to lend 60 percent of its single-family housing funds to the low-income group and 40 percent to those of very low income, with each authority independent of the other.

Very low income is defined as not more than 50 percent of an area's median income. Low income is not more than 80 percent of the area's median income.

President Ronald Reagan announced a four-part Farm Credit Initiative program on September 18, 1984. This debt-restructuring plan is designed to assist farmers who are good managers, but are experiencing severe financial difficulty, to remain in business and develop sound financial footing. The four initiatives provide:

* A one-time, interest-free, debt set-aside of up to 25 percent, a maximum of $200,000 (whichever is less), of a borrower's FmHA debt, provided the set-aside results in a positive cash flow.

* An FmHA guarantee of 90 percent on loans made by other lenders to non-FmHA borrowers, provided the lenders agree to write off at least 10 percent of their borrower's debt, up to the amount needed to achieve a positive cash flow.

* FmHA contracts at the county level for farm financial and management counseling services, available to any farmer requesting it.

* A five-State pilot program in which FmHA will contract with commercial and Farm Credit System lenders to service FmHA loans in order to expedite loan processing, and to determine if such a program is warranted on a nationwide basis.

Borrowers under this plan must meet the general eligibility requirements as for the agency's farm operating and farm ownership loans.

AN UNDUPLICATED RURAL RESOURCE

FmHA programs operate as a supplement to credit made available by private lenders, not in competition with them, and as a helping hand to the capable and industrious family or community whose progress is blocked by lack of credit resources.

A family in need of farm financing, or a loan for an adequate home, may be of modest circumstances and lack credentials for conventional credit. A rural locality may be without a local lending institution, financial needs of the area may exceed the capacity of institutions that are there, or a rural community may not be able to qualify for financing through the conventional bond market.

In circumstances such as these, resources brought within reach through FmHA help to make up for shortages in local and private resources. As it lends money raised throughout the Nation from investors in Government securities or guarantees loans made by city banks and other commercial lenders, FmHA relays into the rural United States a flow of outside capital needed for farm, home, community, and rural economic development.

Historically, the availability of credit through FmHA, when none other was to be found, has enabled hundreds of thousands of farm families to keep their foothold on the land, rather than abandon farming.

Through the years, FmHA has enabled more than 1.45 million poorly housed rural families to move into adequate homes. The agency is currently helping approximately 12,500 borrowers obtain modernized central water and sewer systems.

The "supervised loan" principal adopted by the agency in its earliest years still is necessary to help borrowers achieve the purposes of their loans and to pay back what they have borrowed. Loan losses written off during the 49 years of the agency amount to less than 1 percent of principal advanced.

SOURCES OF INSURED LOAN FUNDS

FmHA loans classified as "insured" are made from three loan revolving funds. The oldest is the Agricultural Credit Insurance Fund (ACIF), established when FmHA began to make insured loans in the 1940's, and now the fund from which all farmer-program loans are made. The Rural Housing Insurance Fund (RHIF) was established with inauguration of insured rural housing loans in 1965. The Rural Development Insurance Fund (RDIF), established under the Rural Development Act of 1972, took over from ACIF the agency's lending for water, sewer, and other community facilities, and for business and industrial development.

The revolving funds are nourished by the incoming flow of loan repayments, plus the sale of Certificates of Beneficial Ownership to the Federal Financing Bank.

Prior to 1974, investors received actual notes or other security instruments FmHA had taken from borrowers. The investor supplied to FmHA an amount equal to principal owed on the note and the agency guaranteed repayment of the investments with interest. As borrowers repaid loans, payments were made to investors and the value of the investment was reduced. Until 1970, with FmHA program levels requiring less than $1 billion a year of note marketing, sales were conducted directly from FmHA. From 1970 through 1973, as marketing requirements rose to more than $2 billion a year, the agency increased sales by marketing large blocks of notes to security dealers, who in turn sold them to trust funds and other large investors.

In 1974, FmHA discontinued the marketing of actual notes and introduced a new investment security instrument, the Certificate of Beneficial Ownership (CBO). CBO's are issued against pools of loan notes and signify that investors will share in interest earnings. Since 1977, FmHA has placed CBO's only with the Federal Financing Bank, an institution closely related to the Department of the Treasury, and has sold no CBO's to the public.

SUMMARY BY PROGRAM AREA

From the beginning of the Resettlement Administration in 1935 until the end of fiscal year 1984, a total of $124,429,165,805 was advanced or obligated in more than 9.5 million loans and grants made through FmHA and its predecessor agencies.

Program by program, the all-time totals as of September 30, 1984, are as shown on page 21.

The unpaid principal owed to FmHA on all FmHA loans as of September 30, 1984, totaled $61,547,640,000.

The annual volume of programs, making FmHA the largest Federal loan agency dealing directly with borrowers, reflects the emphasis during the 1960's and 1970's on resources for development or revival of the whole rural community. Money spent on programs increased from $300 million to $1.6 billion during the 1960's. Since then, the following annual levels have been recorded (in thousands):

FY 1969 --	$ 1,431,925
FY 1970 --	1,639,749
FY 1971 --	2,414,316
FY 1972 --	2,789,806
FY 1973 --	3,754,934
FY 1974 --	3,601,475
FY 1975 --	5,486,089
*FY 1976 --	7,190,920
FY 1977 --	7,255,534
FY 1978 --	11,111,102
FY 1979 --	14,601,635
FY 1980 --	12,965,758
FY 1981 --	13,975,037
FY 1982 --	8,778,217
FY 1983 --	7,314,494
FY 1984 --	7,995,093

The downward dip between fiscal years 1973 and 1974 was attributed to an exceptionally great outlay for farm emergency loans in 1973 and a January-June moratorium on new subsidized housing that decreased the backlog of loan applications for fiscal year 1974. The high volumes from 1978 through 1981 included record levels for farm emergency, housing, community facility, and business and industrial programs.

Following are summaries of current FmHA services.

FARMER PROGRAMS

FmHA helps finance farmers who generally cannot get credit they need from other lenders at reasonable rates and terms. January 1 figures indicate FmHA held 7 percent of the total outstanding farm debt in 1979, 9.7 percent outstanding in 1980, 10.7 percent in 1981, 11.5 percent in 1982, and 11 percent in 1983 and 1984.

The average U.S. farmer had real estate assets of $322,600 on January 1, 1984, compared to $311,307 in 1980. Currently, the annual production expenses per farm average about $57,100. In 1983, the average U.S. farmer had about $112,400 invested in machinery and other non-real estate assets, up from $33,609 in 1970.

Farm ownership loans enable family-size farmers lacking other sources of credit to buy, improve, or refinance farm real estate. Family size farms operated by individuals, partnerships, cooperatives, or corporations can be considered for eligibility. Loan limits are $200,000 for insured loans and $300,000 for guaranteed loans. Farm ownership loans may be repaid in up to 40 years. The interest rate for insured loans is set periodically by the Secretary of Agriculture, based on the cost of Government borrowing. Repayment terms and interest rates are negotiated between the borrower and the lender in the case of guaranteed loans. Insured loan borrowers must refinance through conventional lenders when financially able, thereby "graduating" from FmHA credit. Loans are secured by one or more mortgages on the farm real estate.

Farm operating loans, insured or guaranteed, are usually secured by chattel mortgages on feed, growing crops, livestock, machinery, or other elements of production. Family farmers and ranchers lacking other sources of production financing may be eligible. The interest rate for insured loans is set periodically, based on the cost of government borrowing. The limit is $200,000

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*Includes Transition Quarter

for insured loans and $400,000 for guaranteed loans. Interest rates for guaranteed loans are negotiated between lender and borrower. Terms for operating loans usually range from 1 to 7 years, according to loan purpose, with a maximum repayment period of 15 years for consolidated or rescheduled loans. A loan which is rescheduled may be changed to a limited resource loan for a qualified borrower.

Limited resource insured farm ownership and operating loans are made to owner-operators or tenant-operators who, because of lack of experience, equipment, capital, land, adequate financing, or due to underdeveloped farms, low net income, and inadequate cash flow, need a lower interest rate to service their debts and have a reasonable chance of success. These are obstacles faced most often by young, beginning, and minority farmers who have not been able to develop farms which earn them an adequate living. The limited resource farmer borrows at the lower interest rates until able to pay the regular rate of interest.

Disaster emergency loans help farmers recover from actual production and physical losses inflicted by natural disasters such as drought, floods, and hailstorms.

To be eligible for an emergency loan, the county in which the farm is located must have been declared an emergency or major disaster area by the President, or determined to be a natural disaster area by the Secretary of Agriculture, or in some cases, by the FmHA Administrator. The FmHA Administrator can make the determination when only severe physical losses are sustained as a result of a disaster. Areas contiguous to a designated county are also eligible.

Qualified applicants unable to obtain suitable credit elsewhere may receive subsidized loss loans. Applicants who are able to obtain suitable credit elsewhere may receive actual loss loans at rates prevailing in the private market as determined by the Secretary of Agriculture, provided they are otherwise eligible.

Other farmer programs include insured or guaranteed loans for improvement of soil and water resources, and insured loans to Indian tribal organizations to buy privately owned land located within reservation boundaries.

Under the 1984 Farm Credit Initiatives program to help financially distressed farmers, part of a borrower's FmHA debt (up to 25 percent, to a maximum of $200,000) can be set aside for 5 years without interest if this will help restore a positive cash flow position. For non-FmHA borrowers, the agency can guarantee up to 90 percent of a loan if the lender is willing to adjust and restructure the debt. FmHA, along with commercial and Farm Credit System lenders, will provide additional credit counseling and farm management guidance to any farmer requesting it.

HOUSING PROGRAMS

Housing credit was scarce in rural America until the late 1960's, and the consequences were highly visible throughout the Nation's towns and countryside. With 27 percent of the national population, rural America had 47 percent of the Nation's substandard housing. This meant that the ratio of bad housing to number of families was twice as great in rural communities as in the cities.

However, a large-scale attack on rural housing blight has been mounted by FmHA since 1965. Insured loan service comparable to Federal urban housing credit is available to rural people of low or moderate income. Over 1.1 million new or modernized family-owned homes and about 310,000 new apartment units have been built in rural communities. About one-third of the apartment projects fill the need of elderly people for low-cost rental housing.

Since 1949, FmHA has provided $45 billion for housing. During fiscal year 1984, FmHA loans and grants for $3.25 billion funded more than 71,000 living units.

Individual home ownership (Section 502) insured loans go to families of very low, low, and moderate income, including senior citizens, who need adequate housing. Maximum term for repayment is 33 years. Interest rates vary according to the cost of Government borrowing. Interest credit, which may reduce the effective interest rate to as low as 1 percent, may be available to qualified low-income borrowers.

FmHA housing credit is available to eligible applicants in rural communities with populations of less than 10,000. This credit may be available in communities between 10,000 and 20,000 if they are not contained within a Metropolitan Statistical Area (MSA), and the Secretaries of the Departments of Agriculture and Housing and Urban Development have determined that there is a serious lack of credit for low- and moderate-income households in that location.

Very-low-income homeowners may be eligible for grants or low-interest (Section 504) loans for repairs needed to remove health and safety hazards. Very-low-income elderly homeowners may be eligible for a maximum loan of $7,500, a maximum grant of $5,000, or maximum loan-grant combination of $7,500 to make necessary repairs to their homes. In order to qualify for grant assistance, applicants must be 62 years of age or older and have an income so low they cannot repay all or part of a Section 504 loan.

Rental housing (Section 515) insured loans provide modernized rental or cooperative housing for persons with low and moderate incomes and for those age 62 and older in rural communities of not more than 10,000 population. Such loans may also be available in communities between 10,000 and 20,000 population if the facility is not within an MSA. The loans are repayable in not more than 50 years. Provisions are made for interest reductions under certain circumstances, so that low-income tenants may pay a rent within their means. Rent paid by low-income tenants also can be supplemented through a rental assistance program administered by FmHA or HUD's section 8 rent subsidy program.

Mutual self-help housing loans are made to low-income families who wish to work together to build their own homes with financial and technical assistance from FmHA.

Specialized housing programs include loans and grants for development of adequate farm labor housing, grants to qualified organizations to help low-income families accomplish "self-help" homebuilding projects, 2-year loans to nonprofit organizations to develop rural homesites, and home weatherizing improvements with simplified financing through FmHA and rural electric cooperatives or other utility companies.

COMMUNITY PROGRAMS

Water and waste disposal borrowers -- Approximately 13,000 borrowers are presently receiving water and waste disposal service from systems ranging from small local communities to inter-community or multicommunity areas. Projects lacking other means of financing may receive FmHA loans for up to 40 years. In some cases, grants can be made to prevent a system's debt repayment load from imposing excessive service rates on patrons of the system. Systems financed through FmHA cover rural countryside and towns of not more than 10,000 population.

Other community facilities -- The Rural Development Act of 1972 extended FmHA's lending authority to include loans to public bodies or nonprofit organizations for community facilities that provide essential services to rural residents. Fire protection, community halls, hospitals, nursing homes, medical clinics, libraries, and schools are among more than 30 types of community facilities eligible for financing.

Facilities may be in the rural countryside or towns of up to 20,000 population. Loan repayment is scheduled for up to 40 years. Interest rates are fixed for the life of the loan and are based on the current market yield for municipal obligations at the time of approval. Additional interest charges may apply to projects located on prime or unique farmland.

Loan applications for public safety such as rescue or fire protection facilities and equipment receive priority status for funding. Joint funding of projects with other lending sources is emphasized in order to receive maximum benefit from program sources.

Other programs -- Local costs of projects developed under the small watershed and resource conservation and development programs also may be financed through loans by FmHA to sponsoring local organizations.

BUSINESS AND INDUSTRY PROGRAMS

The business and industry (B&I) loan program was legislated in 1972 under Section 310B of the Consolidated Farm and Rural Development Act in order to encourage business and industrial development in rural areas and to create or preserve employment opportunities in these areas. The program is administered primarily as a guaranteed loan program in communities under 50,000 population, with emphasis on communities of less than 25,000.

When the program began in 1974, there was little rural business credit available. Most industries had not yet recognized the benefits of locating in rural areas and, at that time, national migration was toward larger cities. Today the situation has reversed. During the life of the program, FmHA has guaranteed 7,017 business and industry loans totaling $5.6 billion. In fiscal year 1984, 75 of these loans were made and guaranteed for $124 million.

Under the business and industry program, commercial loans, guaranteed up to 90 percent against loss of principal and interest, are made by lenders to individuals and corporations. The interest rate on these guaranteed loans is negotiated between the borrower and the lender. Loans may be made for improving, developing, or financing business, industry, and employment.

1984 OBLIGATIONS FOR ALL PROGRAMS

Nationwide and State totals of major FmHA loans and grants for fiscal year 1984 follow.

U.S. DEPARTMENT OF AGRICULTURE
FARMERS HOME ADMINISTRATION

Loans and Grants by Program -- Fiscal Year 1984

	Number of Loans or Grants	Dollar Amount
FARMER PROGRAMS:		
Farm Operating Loans	60,167	$ 2,071,154,042
Farm Ownership Loans	8,717	700,695,861
Emergency Loans	34,997	1,051,627,156
Economic Emergency Loans	5,770	599,333,700
Soil and Water Loans (individual)	771	12,540,360
Indian Tribe Land Acquisition Loans	3	2,620,000
Farmer Programs, Total	110,425	$ 4,437,971,119
RURAL HOUSING PROGRAMS:		
Low-Moderate Income Housing Loans	56,126	$ 1,844,137,189
Compensation for Construction Defects (Grants)	117	395,478
Very-Low-Income Repair Loans	2,360	7,172,622
Very-Low-Income Repair Grants	3,642	12,499,900
Rural Rental Housing Loans	1,264	919,002,010
Rental Asst. Program:		
Rental Housing (10,482 Units)	665	108,228,606
Labor Housing (268 Units)	8	2,765,644
Farm Labor Housing Loans	76	5,484,870
Farm Labor Housing Grants	7	9,807,080
Site Loans	2	212,640
Self-Help Housing Grants	32	5,091,930
Housing Programs, Total	64,299	$ 2,914,797,969
COMMUNITY PROGRAMS:		
Water and Waste Disposal Dev. Loans	645	$ 270,000,000
Water and Waste Disposal Dev. Grants	276	103,741,820
Development Grants Other Than FmHA	60	14,149,600
Community Facility Loans	173	129,998,500
Resource Conservation and Development Loans	2	82,000
Community Programs, Total	1,156	$ 517,971,920
BUSINESS & INDUSTRY PROGRAMS:		
Business & Industrial Loans	75	$ 124,352,250
Business/Industry Programs, Total	75	$ 124,352,250
FmHA PROGRAM TOTALS:		
Loans	171,148	$ 7,738,413,200
Grants (FmHA)	4,747	242,530,458
Other Than FmHA Grants	60	14,149,600
FmHA Program Total	175,955	$ 7,995,093,258

NOTE: All guaranteed loans based on guarantee rates.

STATISTICS ON FmHA PERFORMANCE BY FISCAL YEAR
(Dollars in Billions)

I Active Borrowers and Amount Outstanding as of End of Fiscal Year: a/

	1982		1983		1984	
	Active Borrowers	Amount (Bil.)	Active Borrowers	Amount (Bil.)	Active Borrowers	Amount (Bil.)
Farm Operating	103,818	$ 2.7	113,728	$ 3.5	118,572	$ 4.1
Farm Emergency	123,433	10.7	116,628	9.8	125,778	10.0
Economic Emergency	65,614	4.6	62,180	4.3	60,459	4.3
Farm Ownership	122,546	5.8	123,080	6.3	124,954	6.9
RH 502/504	1,013,955	20.7	1,019,074	21.6	1,011,803	22.1
Rental Housing	8,737	4.4	9,588	5.0	10,478	5.7
Water & Waste	11,911	5.2	12,493	5.7	12,873	6.1
* All Programs	1,474,263	56.2	1,480,544	58.5	1,488,264	61.5

II Write-offs as Percent of Cumulative Advances (Insured and Direct Programs):

	1982 Sept. 30th	1983 Sept. 30th	1984 Sept. 30th
Farm Operating.......	1.3%	1.2%	1.2%
Farm Emergency:			
Total..............	.7%	.7%	.7%
Current Program....	.2%	.2%	.3%
Economic Emergency	**	.13%	.26%
Farm Ownership.......	.11%	.11%	.12%
RH 502/504...........	.15%	.16%	.19%
Rural Rental Housing.	.01%	.01%	.01%
Business & Industrial Loans (Insured)....	0	0	0
* All Programs.......	.5%	.6%	.5%

a/ Excludes guaranteed loans
* Includes small programs not listed, so columns do not add.
** Less than 0.05 percent.

FARMERS HOME ADMINISTRATION
Loans and Grants by Program -- All-Time Total through September 30, 1984

	Number of Loans or Grants	Dollar Amount
FARMER PROGRAMS:		
Farm Operating Loans..........................	2,441,137	$ 16,300,241,347
Farm Ownership Loans..........................	396,223	10,881,772,869
Recreation Loans (individual).................	463	20,527,880
Emergency Loans...............................	1,219,454	22,188,826,270
Economic Emergency Loans......................	126,770	7,227,951,980
Grazing Association Loans.....................	605	129,419,696
Soil and Water Loans (individual).............	42,998	481,214,462
Irrigation and Drainage Loans.................	610	32,240,909
Indian Land Acquisition Loans.................	83	93,871,800
Farmer Programs, Total..........	4,228,343	$ 57,356,067,213
RURAL HOUSING PROGRAMS:		
Individual Housing Loans (502 & 504)***........	1,850,136	$ 34,525,169,806
Compensation for Construction Defects (Grants)............................	224	691,444
Very-Low-Income Repair Grants.................	50,961	126,543,907
Rural Rental Housing Loans....................	18,024	7,720,847,530
Rental Asst. Program:		
Rental Housing............(111,997 Units)	1,729**	2,101,734,377
Labor Housing...............(5,057 Units)	18**	98,772,804
Farm Labor Housing Loans......................	1,674	175,805,820
Farm Labor Housing Grants.....................	222	162,172,570
Site Loans....................................	171	23,244,730
Self-Help Housing Grants......................	457	77,038,011
Rural Housing Supervisory Assistance Grants....	57	5,000,000
Housing Programs, Total	1,923,673	$ 45,017,020,999
COMMUNITY PROGRAMS:		
Water and Waste Disposal Loans................	26,476	$ 8,466,694,844
Water and Waste Disposal Grants...............	12,618	2,647,807,486
Community Facility Loans......................	4,574	2,082,990,470
Industrial Development Grants.................	1,367	83,549,279
Watershed and Flood Prevention Loans..........	485	173,366,224
Resource Conservation and Development Loans....	290	28,912,409
Rural Development Planning Grants (ADA)........	605	19,000,000
Development Grants Other than FmHA............	1,989	321,916,065
Community Programs, Total	48,404	$ 13,824,236,777
BUSINESS & INDUSTRY PROGRAMS:		
Guaranteed Business/Industrial Loans...........	7,017	$ 5,614,134,974
Business/Industry Programs, Total	7,017	$ 5,614,134,974
DISCONTINUED PROGRAMS:		
Emergency Livestock Loans.....................	7,738	$ 1,045,660,130
State Corporation Farm Operating Loans.........	185,904	158,964,394
Rural Rehabilitation Loans....................	3,031,331	1,015,825,965
Economic Opportunity Loans (indiv.)............	64,660	109,394,912
Economic Opportunity Loans (assn.).............	1,476	21,107,481
*Recreation Association Loans..................	1,035	110,510,460
Rural Renewal Loans...........................	56	6,550,300
Water Facility Loans (indiv.)..................	18,296	29,695,363
Water/Sewer Comprehensive Planning Grants......	1,834	22,293,387
Bureau of Reclamation, Soil and Water Loans....	283	4,935,550
Land Conservation and Development Loans........	274	267,900
Special Impact Grants.........................	2	2,700,000
State Corporation Farm Ownership Loans, Agricultural Credit Corporation Loans, Resettlement Projects, Water Utilization and Construction Loans................	(number not available)	89,800,000
Total Discontinued.............	3,312,889	$ 2,617,705,842
GRAND TOTALS --	9,520,326	$124,429,165,805

* Recreation Assn. Loans included in Community Facility Loans since 1974.

** Data collection started in 1983.

*** Includes very-low-income repair loans.

MAJOR PROGRAM TOTALS BY STATE - FISCAL YEAR 1984

(In Millions of Dollars)

	FARM PROGRAMS		HOUSING PROGRAMS		COMMUNITY SERVICE		BUSINESS & INDUSTRY		TOTAL ALL PROGRAMS	
STATE	Number	Dollars	Number	Dollars	Number	Dollars	Number	Dollars	Number	Dollars
ALABAMA	2,439	$ 90.3	1,583	$ 68.1	26	$ 11.5	0	$ 0	4,048	$ 170.0
ALASKA	0	0	183	17.2	7	3.0	4	1.6	194	21.8
ARIZONA	267	18.6	491	18.0	1	.2	1	.6	760	37.5
ARKANSAS	5,201	183.2	1,744	59.3	86	20.0	2	6.8	7,033	269.3
CALIFORNIA	943	74.7	2,366	151.3	25	9.1	0	0	3,334	235.0
COLORADO	577	36.7	468	16.7	0	0	0	0	1,045	53.4
CONNECTICUT	143	5.8	373	23.2	12	9.4	0	0	528	38.4
DELAWARE	93	5.2	118	6.4	0	0	0	0	211	11.7
FLORIDA	552	35.7	1,281	70.1	24	15.4	0	0	1,857	121.3
GEORGIA	2,395	136.2	1,331	64.0	35	18.0	1	1.6	3,762	219.8
HAWAII	50	3.4	337	17.6	0	0	0	0	387	21.1
IDAHO	896	45.0	536	13.0	6	.5	0	0	1,438	58.5
ILLINOIS	7,523	261.4	1,753	61.4	26	13.2	0	0	9,302	336.0
INDIANA	2,880	130.1	1,638	72.1	23	10.8	0	0	4,541	213.0
IOWA	9,139	343.3	1,013	37.5	26	12.3	1	.5	10,179	393.6

MAJOR PROGRAM TOTALS BY STATE - FISCAL YEAR 1984

(In Millions of Dollars)

	FARM PROGRAMS		HOUSING PROGRAMS		COMMUNITY SERVICE		BUSINESS & INDUSTRY		TOTAL ALL PROGRAMS	
STATE	Number	Dollars	Number	Dollars	Number	Dollars	Number	Dollars	Number	Dollars
KANSAS	2,267	$ 85.7	505	$ 19.6	15	$ 10.7	0	$ 0	2,787	$ 116.0
KENTUCKY	6,880	180.0	1,995	95.4	69	31.0	0	0	8,944	306.3
LOUISIANA	3,728	193.0	1,930	99.0	38	23.6	2	1.8	5,698	317.3
MAINE	860	28.8	1,531	66.3	26	5.9	2	5.1	2,419	106.1
MARYLAND	698	23.3	568	36.5	8	4.9	0	0	1,274	64.7
MASSACHUSETTS	163	7.0	499	23.0	11	4.5	0	0	673	34.4
MICHIGAN	1,921	82.6	2,583	109.6	30	26.9	4	9.8	4,538	228.8
MINNESOTA	4,472	207.0	701	39.7	39	18.3	2	1.7	5,214	266.7
MISSISSIPPI	4,516	212.8	7,464	337.7	94	27.9	2	6.9	12,076	585.2
MISSOURI	7,385	206.1	1,646	60.2	14	7.2	2	1.7	9,047	275.2
MONTANA	1,069	54.6	434	16.3	1	.1	1	1.1	1,505	72.1
NEBRASKA	2,615	125.8	378	14.2	11	1.2	0	0	3,004	141.2
NEVADA	83	3.3	94	9.5	3	.5	0	0	180	13.3
NEW HAMPSHIRE	51	1.5	632	28.5	11	3.6	0	0	694	33.5
NEW JERSEY	306	12.0	722	33.3	1	.04	1	2.0	1,030	47.4

MAJOR PROGRAM TOTALS BY STATE - FISCAL YEAR 1984

(In Millions of Dollars)

	FARM PROGRAMS		HOUSING PROGRAMS		COMMUNITY SERVICE		BUSINESS & INDUSTRY		TOTAL ALL PROGRAMS	
STATE	Number	Dollars	Number	Dollars	Number	Dollars	Number	Dollars	Number	Dollars
NEW MEXICO	434	$ 21.8	765	$ 25.2	7	$ .9	0	$ 0	1,206	$ 48.0
NEW YORK	1,398	51.9	1,219	45.9	28	13.6	1	.05	2,646	111.4
NORTH CAR.	3,857	130.8	3,091	116.6	41	22.6	13	10.4	7,002	280.4
NORTH DAKOTA	3,362	143.4	447	17.2	8	1.8	2	28.4	3,819	190.8
OHIO	2,963	142.0	1,616	81.5	35	19.7	7	7.1	4,621	250.3
OKLAHOMA	3,235	150.3	1,190	57.6	41	8.6	1	.6	4,467	217.0
OREGON	461	29.6	810	33.9	14	3.3	0	0	1,285	66.9
PENNSYLVANIA	1,482	49.3	1,891	96.9	7	7.2	1	.6	3,381	153.9
RHODE ISLAND	22	.8	140	8.1	4	.7	0	0	168	10.0
SOUTH CAR.	1,849	83.9	1,924	85.8	36	18.7	4	8.7	3,813	197.1
SOUTH DAKOTA	2,920	102.7	313	12.8	17	5.1	0	0	3,250	120.7
TENNESSEE	4,181	131.2	2,424	92.9	54	22.9	5	7.5	6,664	254.6
TEXAS	7,060	337.3	2,037	100.8	79	41.9	4	1.7	9,180	481.7
UTAH	324	14.0	519	17.2	6	.7	0	0	849	32.0
VERMONT	398	10.3	660	26.3	6	1.7	0	0	1,064	38.2

MAJOR PROGRAM TOTALS BY STATE - FISCAL YEAR 1984

(In Millions of Dollars)

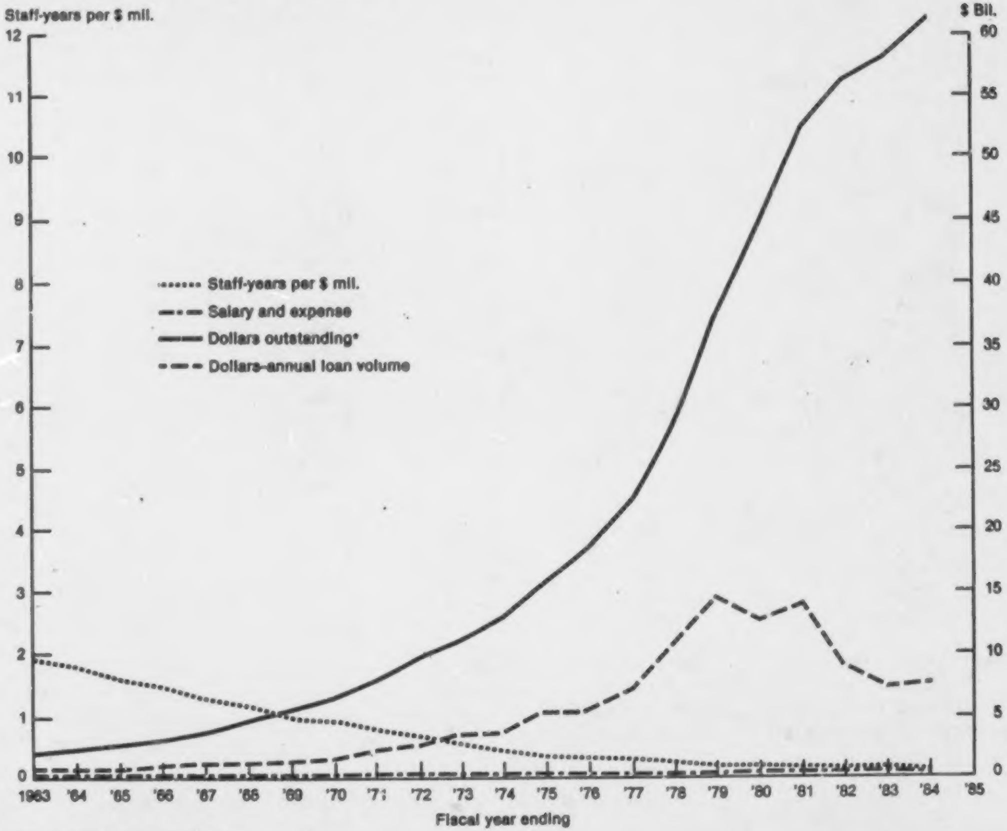
	FARM PROGRAMS		HOUSING PROGRAMS		COMMUNITY SERVICE		BUSINESS & INDUSTRY		TOTAL ALL PROGRAMS	
STATE	Number	Dollars	Number	Dollars	Number	Dollars	Number	Dollars	Number	Dollars
VIRGINIA	1,617	$ 54.0	1,530	$ 68.2	28	$ 18.0	0	$ 0	3,175	$ 140.3
WASHINGTON	573	30.3	852	45.1	24	9.9	0	0	1,449	85.3
WEST VIRGINIA	448	11.1	898	41.1	15	7.5	4	6.3	1,365	66.0
WISCONSIN	2,944	126.2	1,455	60.7	13	7.7	3	6.8	4,415	201.3
WYOMING	188	10.1	255	12.3	5	1.0	1	.2	449	23.5
PUERTO RICO	593	13.6	1,855	52.9	18	14.6	3	2.8	2,469	83.9
VIRGIN ISLANDS	4	.1	15	.3	0	0	1	2.2	20	2.7
WEST PACIFIC TERRITORIES	0	0	703	18.2	0	0	0	0	703	18.2
TOTALS	110,425	4,438.0	64,299	2,914.8	1,156	518.0	75	124.4	175,955	7,995.1

(Totals may not add due to rounding.)

(Totals do not include weatherization, rural rental assistance or mutual self-help and contracts.)

Figure 1

Loan and Grant Volume and Staff Productivity



*Does not include "guaranteed loans."

Table 1--Loan and grant volume and staff productivity

	*Principal dollars outstanding, end of fiscal year (Billions)	Annual loan and grant volume (Billions)	Total dollars (Billions)	Total staff years	Salaries and expenses (Millions)	Dollars for which one person is responsible (Millions)	Number of staff years for loan processing and servicing per million dollars
1963	$ 2.038	$ .796	$ 2.834	5,419.0	$ 40.800	$ .523	1.9
1964	2.353	.747	3.100	5,484.1	44.218	.565	1.8
1965	2.753	.800	3.553	5,858.0	49.563	.607	1.6
1966	3.221	1.088	4.309	6,590.1	57.826	.654	1.5
1967	3.914	1.390	5.304	7,102.5	62.214	.747	1.3
1968	4.778	1.359	6.137	7,360.1	67.861	.834	1.2
1969	5.552	1.431	6.983	7,271.7	72.354	.960	1.0
1970	6.525	1.639	8.164	7,662.7	86.159	1.065	.94
1971	7.869	2.414	10.283	8,533.9	103.422	1.205	.83
1972	9.622	2.789	12.411	8,865.9	113.888	1.400	.71
1973	11.206	3.750	14.956	8,672.0	121.766	1.725	.58
1974	12.977	3.591	16.568	8,168.4	128.724	2.029	.49
1975	15.863	5.466	21.302	8,359.0	142.828	2.548	.39
1976	18.456	5.393	23.849	8,555.4	158.692	2.788	.36
1977	22.526	7.236	29.762	9,405.4	187.959	3.164	.32
1978	28.712	11.089	40.428	10,233.0	227.867	3.952	.26
1979	37.304	14.672	51.976	10,842.0	254.517	4.794	.21
1980	44.630	12.966	57.596	11,813.0	288.321	4.876	.21
1981	52.470	13.975	66.445	12,541.0	322.748	5.298	.19
1982	56.213	8.778	64.975	11,213.0	327.231	5.795	.17
1983	58.514	7.314	65.828	11,566.0	356.595	5.692	.18
1984	61.548	7.995	69.543	12,658.0	390.661	5.494	.18

* Does not include "guaranteed loans."

Figure 2

Repayments, Charge-Offs, Judgments, and Interest Payments

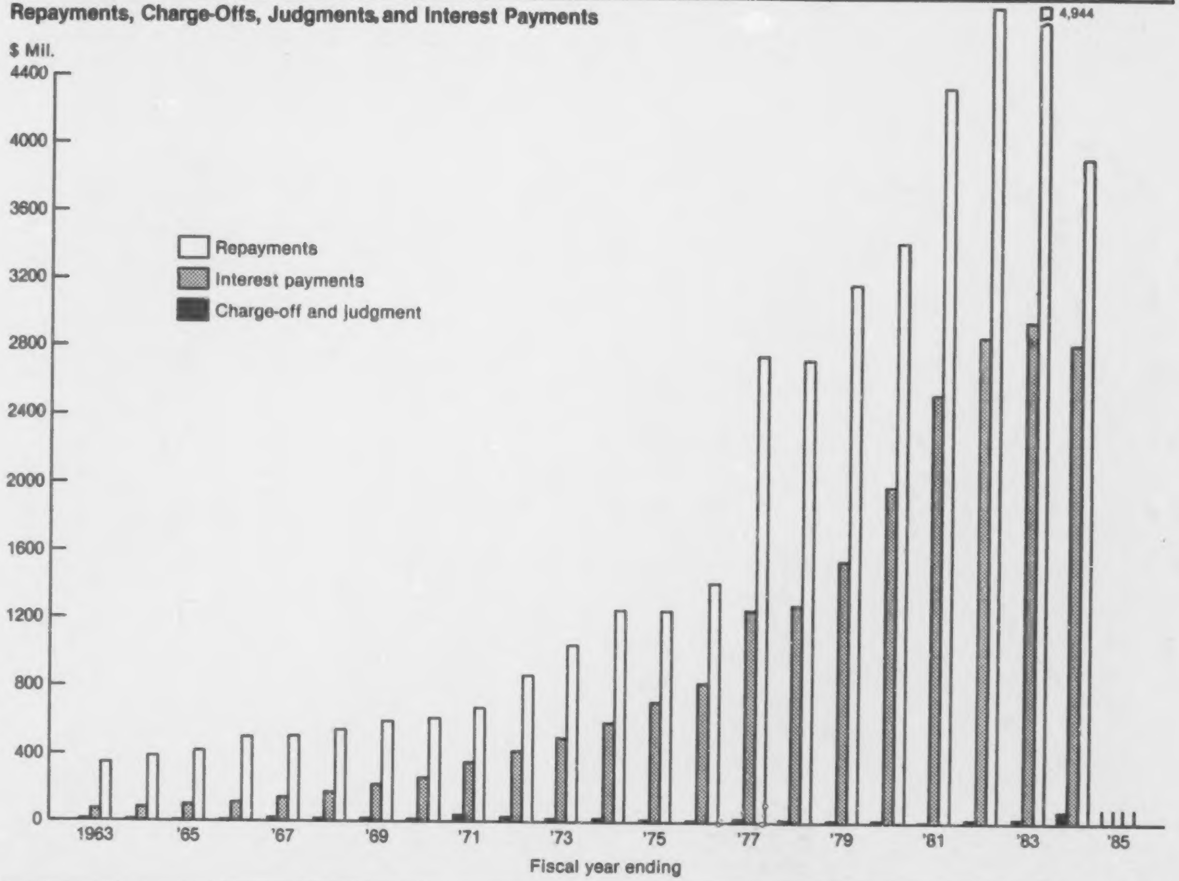
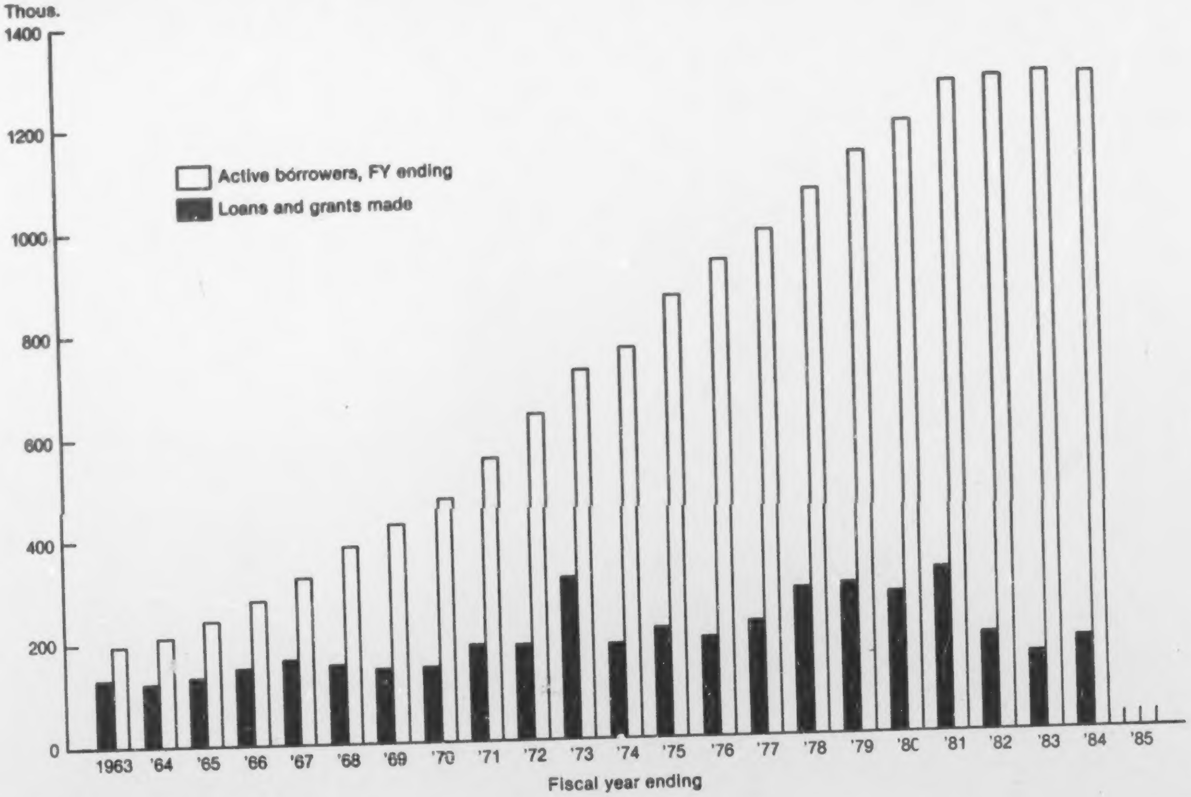


Table 2--Report of loan collection and debt adjustment activities during the year

Fiscal year	Principal repayments (Millions)	Principal charge offs and judgments (Millions)	Interest payments (Millions)
1963	$ 349.1	$ 5.8	$ 67.9
1964	388.9	7.0	84.9
1965	413.7	4.8	99.7
1966	502.6	4.9	118.6
1967	503.4	17.9	145.7
1968	539.9	12.5	182.6
1969	599.2	16.1	222.9
1970	610.5	13.7	259.1
1971	671.6	33.8	344.8
1972	859.2	26.3	415.4
1973	1,045.0	19.7	497.9
1974	1,247.1	22.2	589.2
1975	1,244.2	18.5	704.1
1976	1,404.5	9.2	824.6
1977	2,753.6	21.9	1,251.7
1978	2,725.5	14.3	1,268.3
1979	3,173.3	16.5	1,543.1
1980	3,418.9	15.6	1,983.3
1981	4,325.4	6.9	2,522.6
1982	4,838.2	29.8	2,873.1
1983	4,943.8	43.3	2,960.5
1984	4,885.6	64.6	2,971.4

Figure 3

Total Active Borrowers; Annual Loans Made



*Guaranteed Loans not included. **Estimated.

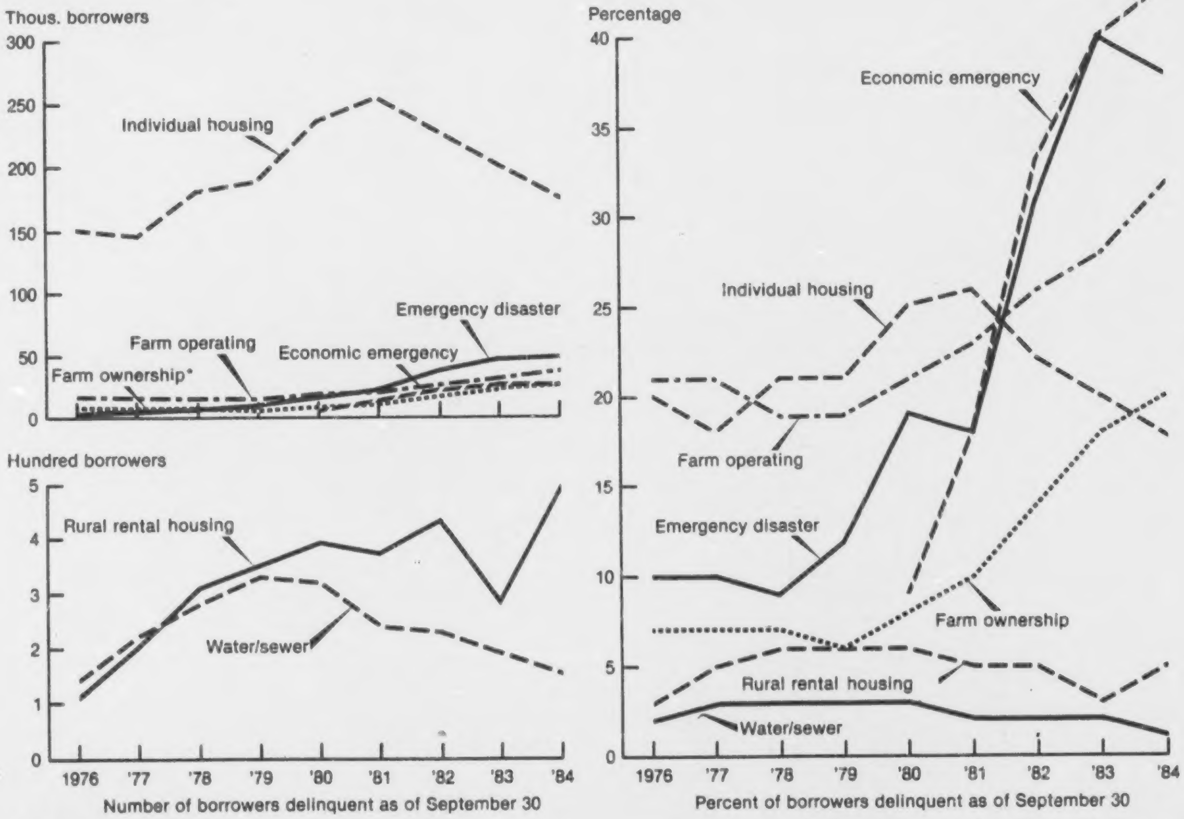
Table 3--FmHA statistics

	Number of active borrowers as of end of fiscal year*			Total number of loans and grants made
	Indiv.	Assoc.	Total	
1963	198,089	543	198,632	134,172
1964	212,420	788	213,208	127,013
1965	241,790	1,265	243,055	138,020
1966	280,098	2,302	282,400	155,889
1967	324,418	3,909	328,327	169,630
1968	377,857	5,088	382,945	155,521
1969	418,167	6,233	424,400	148,414
1970	470,267	6,973	477,240	149,407
1971	548,143	7,556	555,699	191,913
1972	627,744	8,151	635,895	190,188
1973	710,980	8,705	719,653	318,587
1974	750,421	9,000	759,421	189,437
1975	844,527	9,997	854,524	216,852
1976	908,723	11,317	920,040	197,949
1977	967,066	12,945	980,011	222,684
1978	1,040,207	14,412	1,054,619	283,696
1979	1,108,353	16,173	1,124,526	294,890
1980	1,167,006	18,235	1,185,241	274,990
1981	1,228,277	19,929	1,248,206	319,045
1982	1,250,433	21,834	1,272,206	190,555
1983	1,252,449	23,271	1,275,720	153,561
1984	1,250,340	24,658	1,274,998	175,895

* Guaranteed loans not included.

Figure 4

Major FmHA Programs



*Includes nonfarm enterprise loans.

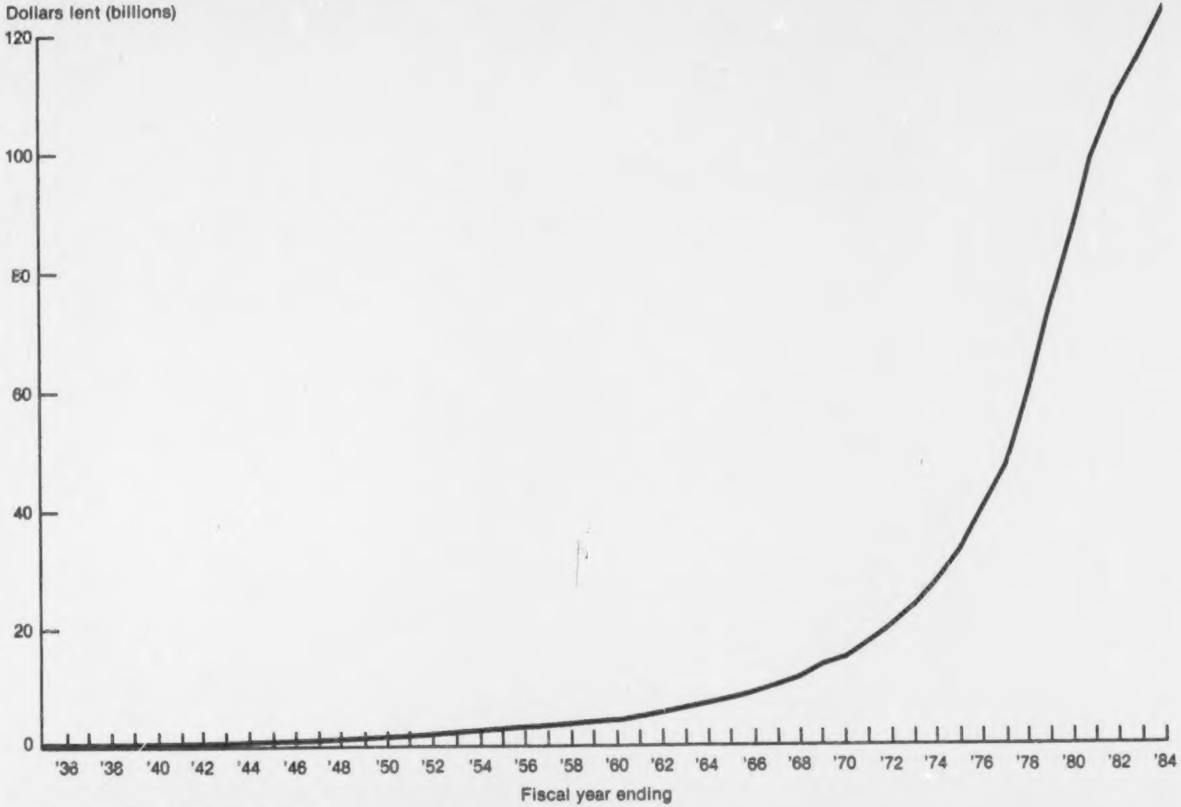
Table 4--Borrowers delinquent, major loan programs, by number and percentage as of September 30

	1977		1978		1979		1980		1981		1982		1983		1984	
Program	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Farm Ownership*	7,685	7	7,741	7	6,936	6	9,209	8	11,711	10	17,068	14	22,090	18	25,595	20
Farm Operating	16,216	21	15,247	19	15,020	19	18,248	21	21,442	23	26,511	26	31,355	28	37,286	31
Emergency Disaster	5,015	10	7,620	9	10,934	12	17,296	19	22,338	18	38,556	31	46,714	40	48,172	38
Economic Emergency	--	--	--	--	--	--	5,560	9	12,509	18	21,514	33	25,049	40	25,768	43
Individual Housing	144,870	18	179,526	21	187,094	21	235,406	25	253,986	26	226,550	22	201,902	20	185,853	18
Rural Rental Housing	203	5	311	6	352	6	393	6	373	5	434	5	288	3	495	5
Water and Waste Disposal	225	3	287	3	333	3	321	3	243	2	232	2	192	2	158	1

* Includes nonfarm enterprise loans.

Figure 5

Cumulative Dollars Lent, Grants Administered



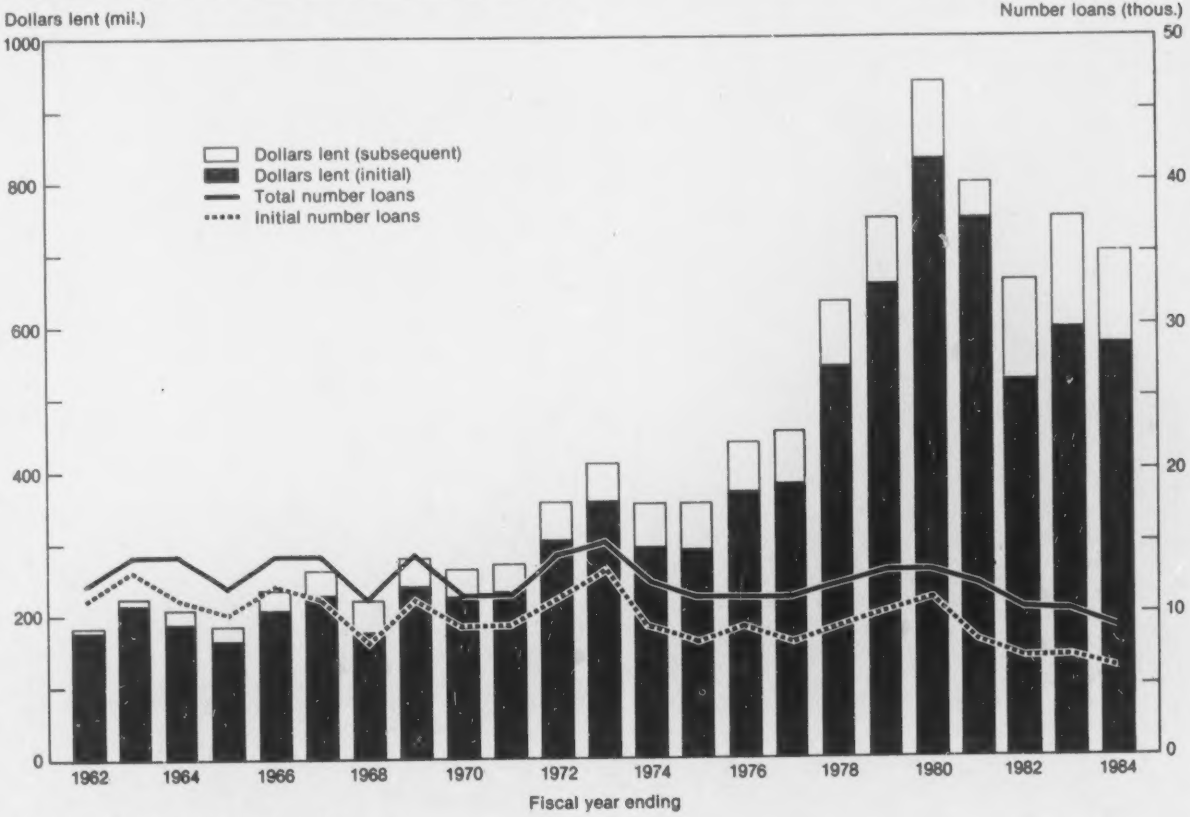
Note: Amounts will not equal due to rounding.

Table 5--Dollars loaned and grants administered (cumulative)

	Farm (Thousands)	Housing (Thousands)	Community (Thousands)	Total dollars (Thousands)
1935	676			676
1936	76,964			76,964
1937	152,466			152,466
1938	232,770			232,770
1939	376,552			376,552
1940	511,576		2	511,578
1941	677,655		56	677,711
1942	854,019		134	854,153
1943	988,046		149	988,195
1944	1,082,514		149	1,082,663
1945	1,167,454		232	1,167,686
1946	1,295,580		381	1,295,961
1947	1,445,061		501	1,445,562
1948	1,528,128		661	1,528,789
1949	1,646,632		754	1,647,386
1950	1,809,284	18,161	1,013	1,828,457
1951	1,961,699	42,253	1,563	2,005,515
1952	2,152,421	63,408	1,961	2,217,789
1953	2,360,918	82,765	2,800	2,446,484
1954	2,636,422	98,833	3,676	2,738,932
1955	2,928,478	98,833	4,863	3,032,174
1956	3,231,423	102,554	5,835	3,339,812
1957	3,565,721	123,845	6,542	3,696,108
1958	3,861,819	156,911	7,540	4,026,270
1959	4,159,454	217,585	10,859	4,387,899
1960	4,426,742	258,321	11,707	4,696,771
1961	4,746,439	328,662	17,353	5,092,454
1962	5,273,854	425,160	30,856	5,729,870
1963	5,864,145	612,900	49,010	6,526,054
1964	6,428,571	750,243	95,034	7,273,848
1965	7,026,754	885,206	161,965	8,073,925
1966	7,692,062	1,153,755	316,793	9,162,610
1967	8,402,694	1,596,875	554,130	10,553,698
1968	9,040,063	2,089,911	781,816	11,911,789
1969	9,740,957	2,602,000	1,000,757	13,343,714
1970	10,383,687	3,395,835	1,203,942	14,983,463
1971	11,079,895	4,794,932	1,522,952	17,397,779
1972	11,898,367	6,413,709	1,875,510	20,187,585
1973	13,330,329	8,277,018	2,335,172	23,942,520
1974	14,353,648	10,070,346	3,120,000	27,543,994
1975	16,362,179	12,315,226	4,352,679	33,030,084
1976	18,187,039	14,840,862	5,412,773	38,440,675
1976 + TQ	18,561,883	15,751,596	5,907,085	40,220,565
1977	20,994,914	18,897,401	7,583,784	47,476,099
1978	25,990,776	22,658,749	9,937,676	58,587,201
1979	33,696,244	26,945,340	12,547,252	73,188,836
1980	40,045,519	31,166,003	15,065,002	86,276,524
1981	48,119,358	35,109,573	17,022,630	100,251,561
1982	52,233,221	38,995,501	17,801,056	109,029,778
1983	55,303,948	42,102,223	18,938,102	116,344,273
1984	59,741,919	45,017,021	19,580,426	124,339,366

Figure 6

Farm Ownership Loans, Number of Loans, Dollars Lent*



*Includes direct loan costs. Excludes insured loan costs.

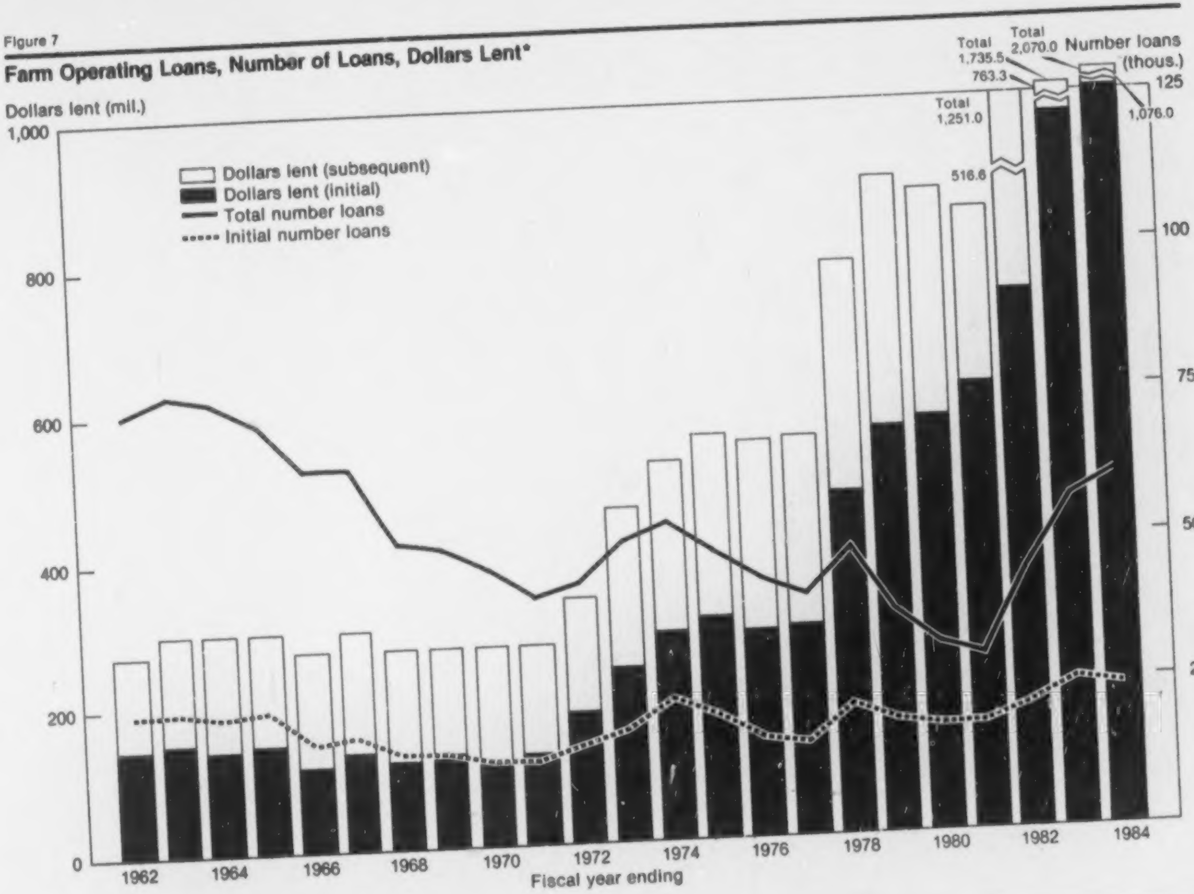
Table 6--Farm ownership loan program:
Number of loans and dollars lent*

	Initial loans		Subsequent loans		Total loans	
	Number	Amount	Number	Amount	Number	Amount
1963	13,286	$212,200,471	1,121	$ 9,555,527	14,407	$221,755,998
1964	11,061	184,899,960	2,497	21,381,410	13,558	206,281,370
1965	9,885	162,295,970	2,301	20,295,320	12,186	182,591,290
1966	11,532	205,806,910	2,747	27,430,513	14,279	223,237,423
1967	11,101	226,587,210	2,886	33,412,389	13,987	259,999,599
1968	8,403	176,289,150	2,411	28,709,744	10,814	204,998,894
1969	10,525	237,047,040	3,177	40,073,052	13,702	277,120,092
1970	8,644	222,949,520	2,841	38,547,055	11,491	261,496,575
1971	8,522	230,560,910	2,434	37,875,258	10,956	268,436,168
1972	10,718	302,220,690	3,037	53,541,329	13,755	355,762,019
1973	12,593	356,058,150	2,899	52,059,220	15,492	408,117,370
1974	8,728	291,482,260	3,269	60,679,170	11,997	352,161,430
1975	7,550	286,608,341	3,048	65,024,420	10,598	351,632,761
1976	8,583	367,204,570	2,788	67,800,228	11,371	435,004,798
1977	8,353	378,916,850	2,769	72,323,130	11,122	451,239,980
1978	9,384	474,266,230	2,631	76,580,270	12,015	550,846,500
1979	10,179	667,699,570	2,389	95,465,200	12,568	768,164,770
1980	10,616	842,738,150	2,356	111,313,930	12,972	954,052,080
1981	9,014	588,163,820	2,839	125,121,290	11,853	813,285,110
1982	6,821	520,994,148	3,409	140,609,190	10,230	661,603,338
1983	6,902	593,863,120	3,296	155,716,260	10,198	749,579,380
1984	6,140	574,859,470	2,577	125,836,390	8,717	700,695,860

* Includes direct loan costs.
Excludes insured loan costs.

Figure 7

Farm Operating Loans, Number of Loans, Dollars Lent*



*Includes direct loan costs. Excludes insured loan cost.

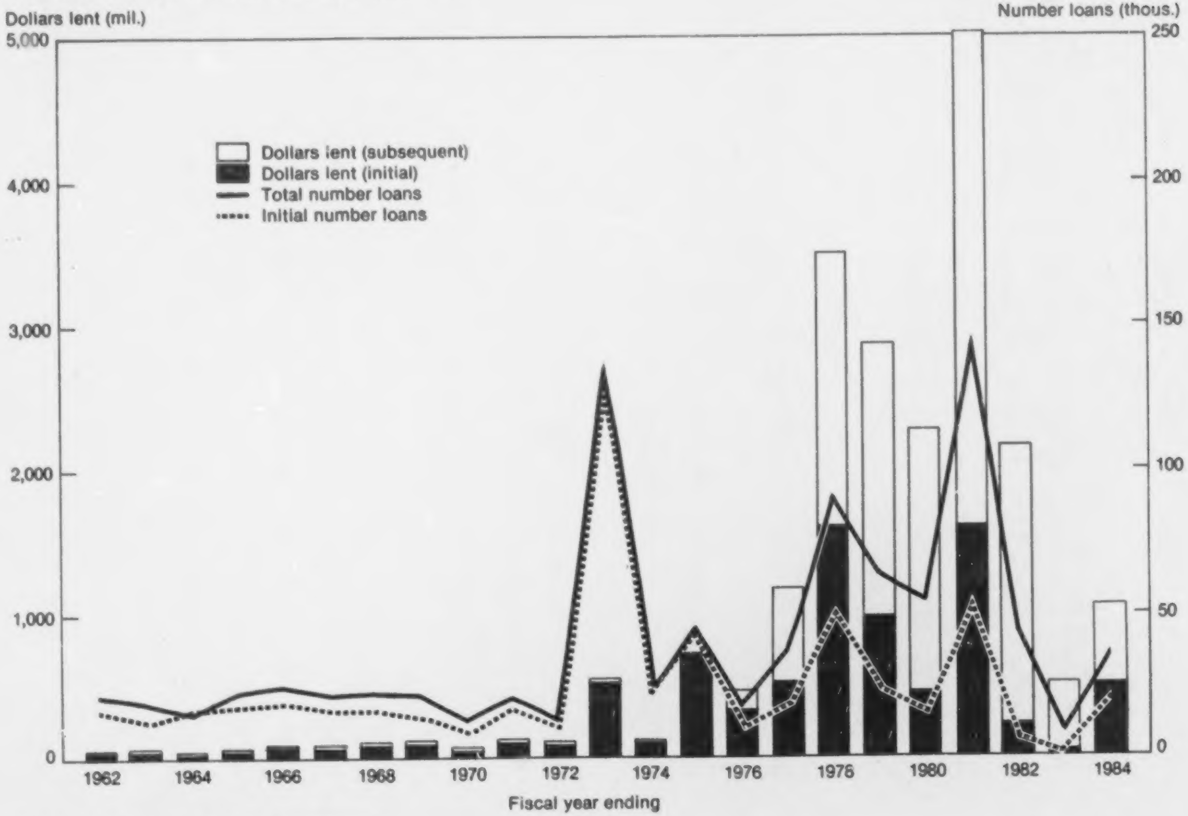
Table 7--Farm operating loan program:
Number of loans and dollars lent*

	Initial loans		Subsequent loans		Total loans	
	Number	Amount	Number	Amount	Number	Amount
1963	23,770	$149,776,720	54,222	$150,223,280	77,992	$ 300,000,000
1964	22,939	139,637,260	53,672	160,362,740	76,611	300,000,000
1965	24,127	146,510,340	48,470	153,489,660	72,597	300,000,000
1966	18,255	115,620,870	46,488	159,379,130	64,743	275,000,000
1967	18,893	131,918,850	46,006	168,081,150	64,899	300,000,000
1968	15,784	119,917,490	36,537	155,082,510	52,321	275,000,000
1969	16,234	127,094,340	34,577	147,905,630	50,811	274,999,970
1970	14,247	114,416,920	32,410	160,583,048	46,657	274,999,968
1971	13,635	125,499,360	28,545	149,500,631	42,180	274,999,991
1972	16,649	181,229,350	27,196	156,056,468	43,845	337,285,818
1973	19,172	237,329,750	31,808	217,314,627	50,980	454,644,377
1974	23,965	282,416,201	29,900	242,577,627	53,865	524,993,821
1975	20,560	302,266,678	28,694	248,520,072	49,254	550,786,750
1976	17,172	279,529,768	26,876	259,687,665	44,048	539,217,433
1977	15,709	283,770,260	24,830	258,573,030	40,539	542,343,290
1978	22,176	466,642,040	27,238	313,985,760	49,414	780,627,800
1979	19,079	552,541,730	18,863	342,212,170	37,942	894,753,900
1980	17,568	565,596,300	14,643	309,232,700	32,211	874,829,000
1981	18,157	605,727,550	11,681	241,875,810	29,838	847,603,360
1982	21,310	734,338,846	23,609	516,669,953	44,919	1,251,008,799
1983	25,108	972,214,470	31,452	763,332,830	56,560	1,735,547,300
1984	24,679	1,076,177,210	35,488	994,976,830	60,167	2,071,154,040

* Includes direct loan costs.
Excludes insured loan costs.

Figure 8

Emergency Loans, Number of Loans, Dollars Lent*



*Includes direct loan costs. Excludes insured loan cost.

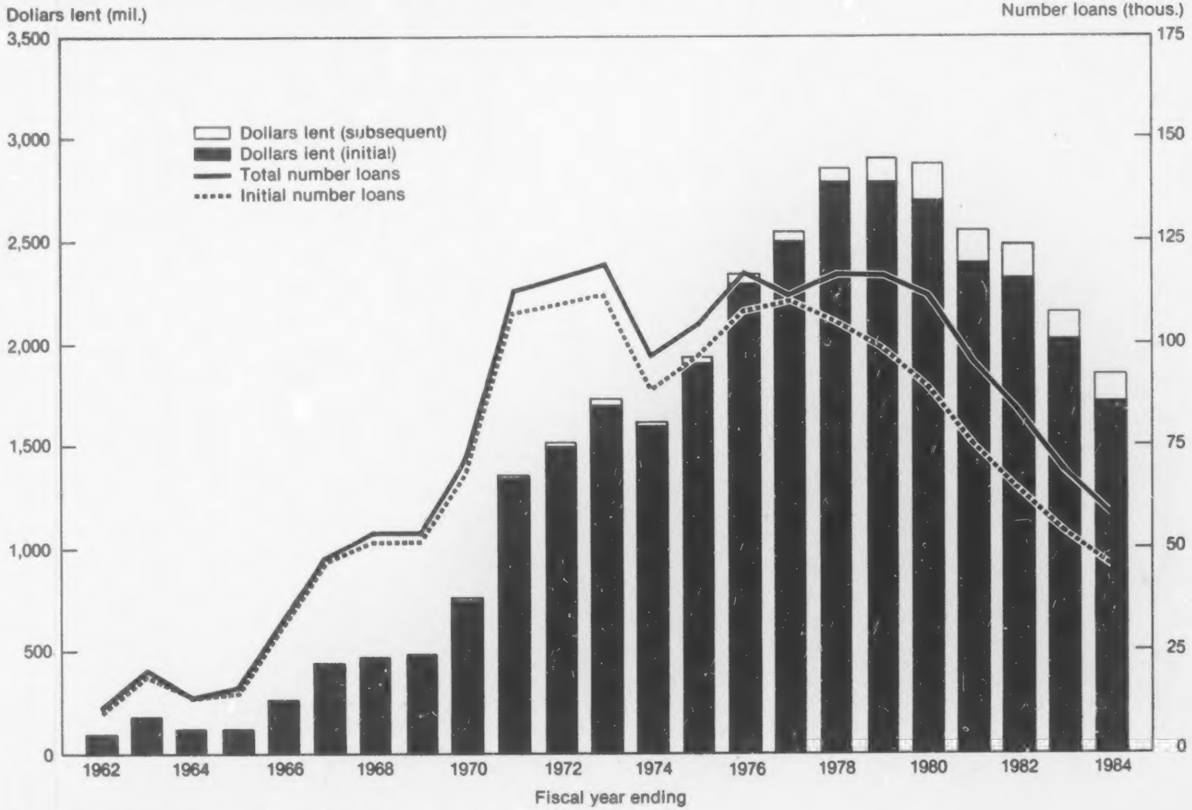
Table 8--Emergency loan program:
Number of loans and dollars lent*

	Initial loans		Subsequent loans		Total loans	
	Number	Amount	Number	Amount	Number	Amount
1963	13,447	$ 45,421,785	5,897	$ 17,057,454	19,344	$ 62,479,239
1964	10,357	33,263,300	4,945	16,934,483	15,302	50,197,783
1965	16,743	60,183,375	5,547	18,263,786	22,290	78,447,161
1966	18,273	77,420,090	6,098	23,069,241	24,371	100,489,331
1967	15,765	66,425,255	6,409	28,197,013	22,174	94,622,268
1968	16,124	77,528,270	6,104	30,646,155	22,228	108,174,425
1969	13,509	75,427,940	7,177	39,288,213	20,686	114,716,153
1970	7,800	56,364,080	4,978	33,066,080	12,778	89,430,160
1971	16,025	101,216,425	3,779	26,419,481	19,804	127,635,906
1972	9,716	83,420,630	3,263	25,491,179	12,979	108,911,809
1973	124,783	527,727,353	3,884	30,039,242	128,667	557,766,595
1974	22,016	117,361,657	418	10,975,112	22,434	128,336,769
1975	42,976	722,263,783	699	12,756,754	43,675	735,020,537
1976	11,880	321,395,514	4,998	156,316,305	16,878	447,711,819
1977	16,666	515,709,080	19,103	662,678,900	35,769	1,178,387,980
1978	48,166	1,558,223,570	40,953	1,853,584,630	89,119	3,411,808,200
1979	24,838	970,026,080	38,075	1,901,615,680	62,913	2,871,641,760
1980	16,127	473,962,490	38,267	1,792,927,830	54,394	2,266,890,320
1981	51,871	1,550,820,070	87,119	3,561,470,360	138,990	5,112,290,430
1982	6,101	222,528,630	36,762	1,950,883,570	42,863	2,173,412,200
1983	1,027	43,478,210	7,744	522,459,290	8,771	565,937,500
1984	20,437	499,991,230	14,560	551,635,930	34,997	1,051,627,160

* Includes direct loan costs.
Excludes insured loan cost.

Figure 9

Rural Housing Loans to Individuals, Number of Loans, Dollars Lent*



*Includes direct loan costs. Excludes insured loan cost.

Table 9--Rural housing 502 and 504 loans to individuals:
Number of loans and dollars lent*

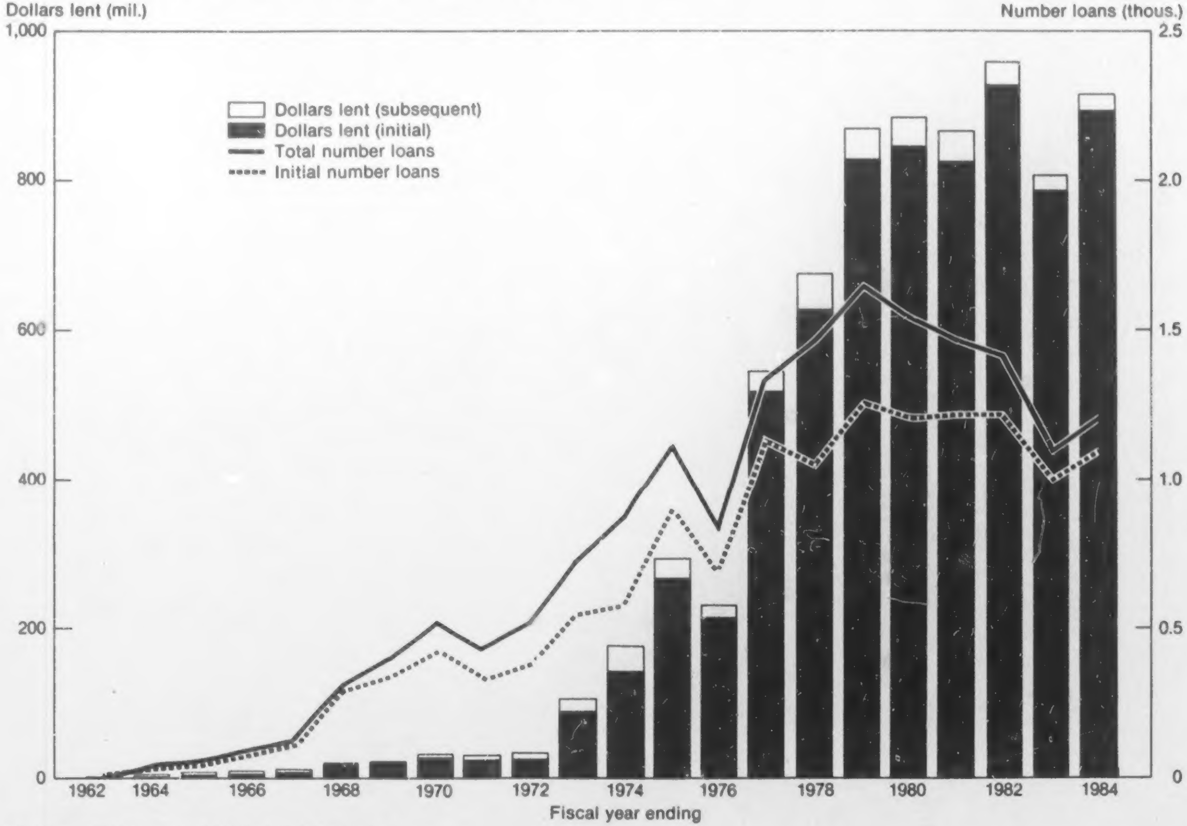
	Initial loans		Subsequent loans		Total loans	
	Number	Amount	Number	Amount	Number	Amount
1963	19,164	184,265,722	694	2,106,004	19,858	186,371,726
1964	13,802	128,876,270	576	1,610,384	14,378	130,486,654
1965	15,177	129,343,600	591	1,632,387	15,768	130,975,987
1966	30,908	255,558,560	1,121	3,061,551	32,029	258,620,111
1967	46,879	425,604,835	1,558	4,527,934	48,437	430,132,769
1968	51,970	468,185,434	2,357	5,479,564	54,327	437,664,998
1969	51,560	480,363,630	2,878	5,857,314	54,438	486,220,944
1970	69,423	750,919,400	3,928	10,677,131	73,351	761,596,531
1971	108,188	1,353,830,290	5,276	13,937,662	113,464	1,376,767,952
1972	110,097	1,549,571,250	5,888	17,048,825	115,985	1,566,620,075
1973	111,779	1,712,380,440	8,004	27,875,832	119,783	1,740,256,272
1974	88,728	1,569,628,860	8,278	24,684,069	97,006	1,594,312,929
1975	96,688	1,903,281,940	8,382	28,169,930	105,070	1,931,451,870
1976	107,514	2,256,680,464	9,544	35,892,200	117,058	2,292,572,664
1977	110,543	2,528,014,600	11,534	48,612,460	122,136**	2,576,675,030**
1978	104,869	2,778,813,490	12,000	56,578,350	117,382**	2,703,242,438**
1979	98,987	2,778,813,490	17,423	114,040,970	117,206**	2,893,558,790**
1980	89,181	2,687,208,580	21,709	178,072,090	112,391**	2,866,530,690**
1981	75,002	2,446,551,790	18,212	160,648,300	94,895**	2,608,876,334**
1982	64,728	2,323,295,534	17,319	163,164,721	83,614**	2,488,262,514**
1983	53,913	2,013,224,690	13,842	130,977,150	68,727**	2,145,352,859**
1984	45,536	1,729,388,690	12,950	121,821,120	58,486	1,851,309,810

* Includes direct loan costs, excludes insured loan cost.

** Includes 59 weatherization loans for 47,970 in FY 1977.
Includes 513 weatherization loans for 447,828 in FY 1978.
Includes 796 weatherization loans for 704,330 in FY 1979.
Includes 1,501 weatherization loans for 1,250,020 in FY 1980.
Includes 1,681 weatherization loans for 1,676,244 in FY 1981.
Includes 1,567 weatherization loans for 1,802,259 in FY 1982.
Includes 972 weatherization loans for 1,151,019 in FY 1983.

Figure 10

Rural Rental Housing Loans, Number of Loans, Dollars Lent*



*Includes direct loan costs. Excludes insured loan cost.

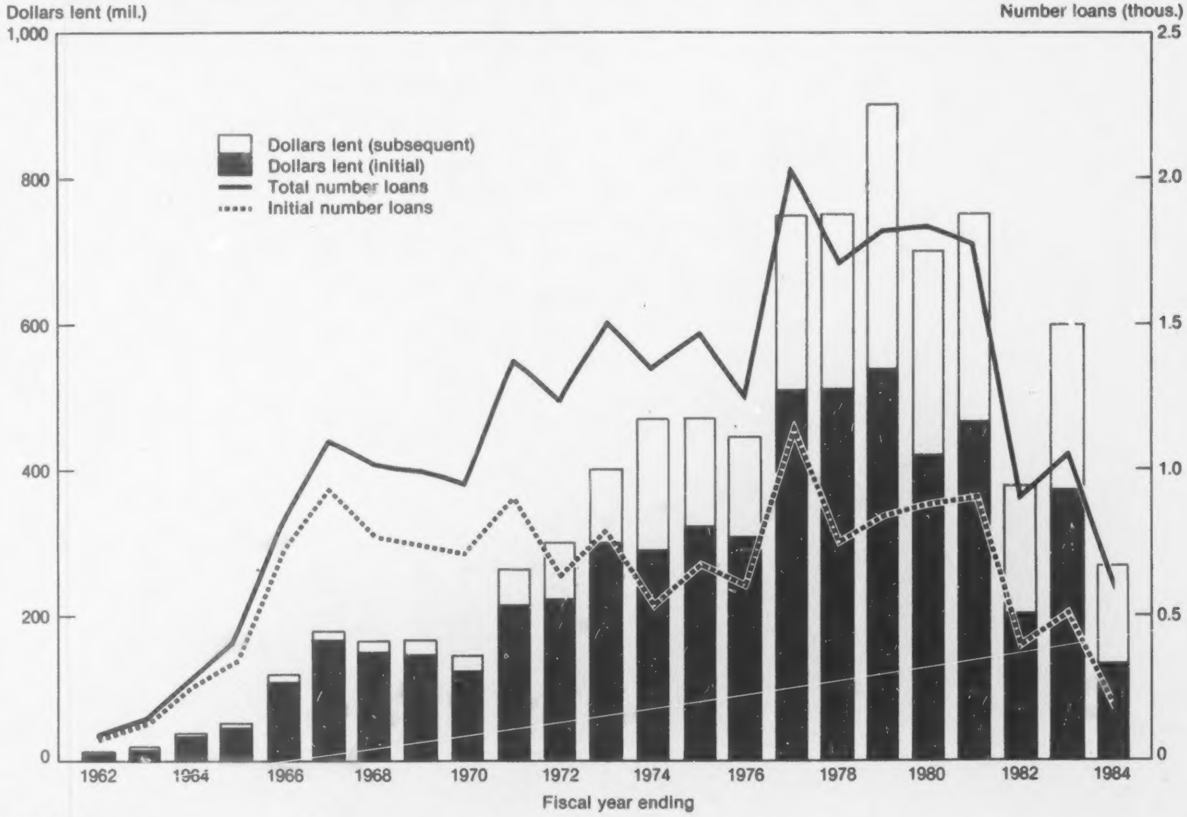
Table 10--Rural rental housing program:
Number of loans and dollars lent*

	Initial loans		Subsequent loans		Total loans	
	Number	Amount	Number	Amount	Number	Amount
1963	2	$ 117,000	—	--	2	$ 117,000
1964	21	1,148,600	1	$ 18,000	22	1,166,600
1965	32	1,787,530	3	230,000	35	2,017,530
1966	76	4,165,770	5	141,400	81	4,307,170
1967	99	5,314,350	11	175,380	110	5,489,730
1968	276	12,427,010	21	748,890	297	13,175,900
1969	329	15,351,280	61	1,983,220	390	17,334,500
1970	412	24,148,230	98	4,292,510	510	28,440,740
1971	325	21,012,400	97	5,776,290	422	26,788,690
1972	372	21,502,910	143	8,614,970	515	40,117,880
1973	546	87,886,880	184	17,175,750	730	105,062,630
1974	562	140,663,110	317	32,650,920	879	173,314,030
1975	903	267,036,590	205	25,319,750	1,153	292,356,340
1976	685	213,992,470	153	17,209,680	838	231,202,150
1977	1,114	518,017,210	222	26,936,970	1,336	544,954.180
1978	1,056	627,442,260	410	48,502,290	1,466	675,944,550
1979	1,247	827,894,470	398	41,614,090	1,645	869,508,560
1980	1,204	841,524,090	335	39,812,050	1,539	881,336,140
1981	1,213	825,921,420	253	38,843,810	1,466	864,765,230
1982	1,220	928,339,980	208	25,327,740	1,428	953,667,720
1983	1,043	783,730,240	152	18,267,160	1,195	801,997,400
1984	1,109	897,327,330	155	21,674,680	1,264	919,002,010

* Includes direct loan costs.
Excludes insured loan cost.

Figure 11

Water Waste Disposal Loans, Number of Loans, Dollars Lent*



*Includes loan costs.

Table 11--Water and waste disposal loan program:
Number of loans and dollars lent*

	Initial loans		Subsequent loans		Total loans	
	Number	Amount	Number	Amount	Number	Amount
1962	69	$ 9,940,500	12	$ 230,500	81	$ 10,121,000
1963	114	13,876,565	21	864,130	135	14,740,695
1964	239	32,876,590	32	1,130,220	271	34,006,810
1965	324	47,982,510	70	2,406,970	394	50,389,480
1966	705	107,889,768	96	4,913,020	801	112,802,788
1967	915	165,206,014	174	9,967,165	1,089	175,173,179
1968	775	149,802,640	241	12,789,710	1,016	162,592,350
1969	739	147,036,310	242	17,610,850	981	164,647,160
1970	647	123,183,450	294	22,847,040	941	146,030,490
1971	899	213,092,800	468	48,611,100	1,367	261,703,900
1972	631	220,777,500	595	79,221,500	1,226	299,999,000
1973	768	300,182,500	734	99,812,300	1,502	399,994,800
1974	546	288,354,157	779	181,644,943	1,325	469,999,100
1975	658	320,188,646	793	149,798,300	1,451	469,986,946
1976	597	308,206,748	648	134,435,086	1,245	442,641,834
1977	1,097	508,238,060	951	240,612,370	2,048	748,850,430
1978	756	509,133,100	946	240,862,700	1,702	749,995,800
1979	823	537,351,830	979	362,648,090	1,802	899,999,920
1980	869	418,664,010	956	281,335,690	1,825	699,999,700
1981	892	466,061,480	876	283,938,500	1,768	749,999,980
1982	423	202,338,450	505	172,661,550	928	375,000,000
1983	558	370,751,900	626	229,248,100	1,184	600,000,000**
1984	259	132,273,600	386	137,726,400	645	270,000,000

* Includes loan costs.
** Includes $225,000,000 under the Emergency Jobs Bill in FY 1983.

Figure 12

Community Facility Loans, Numbers of Loans, Dollars Lent

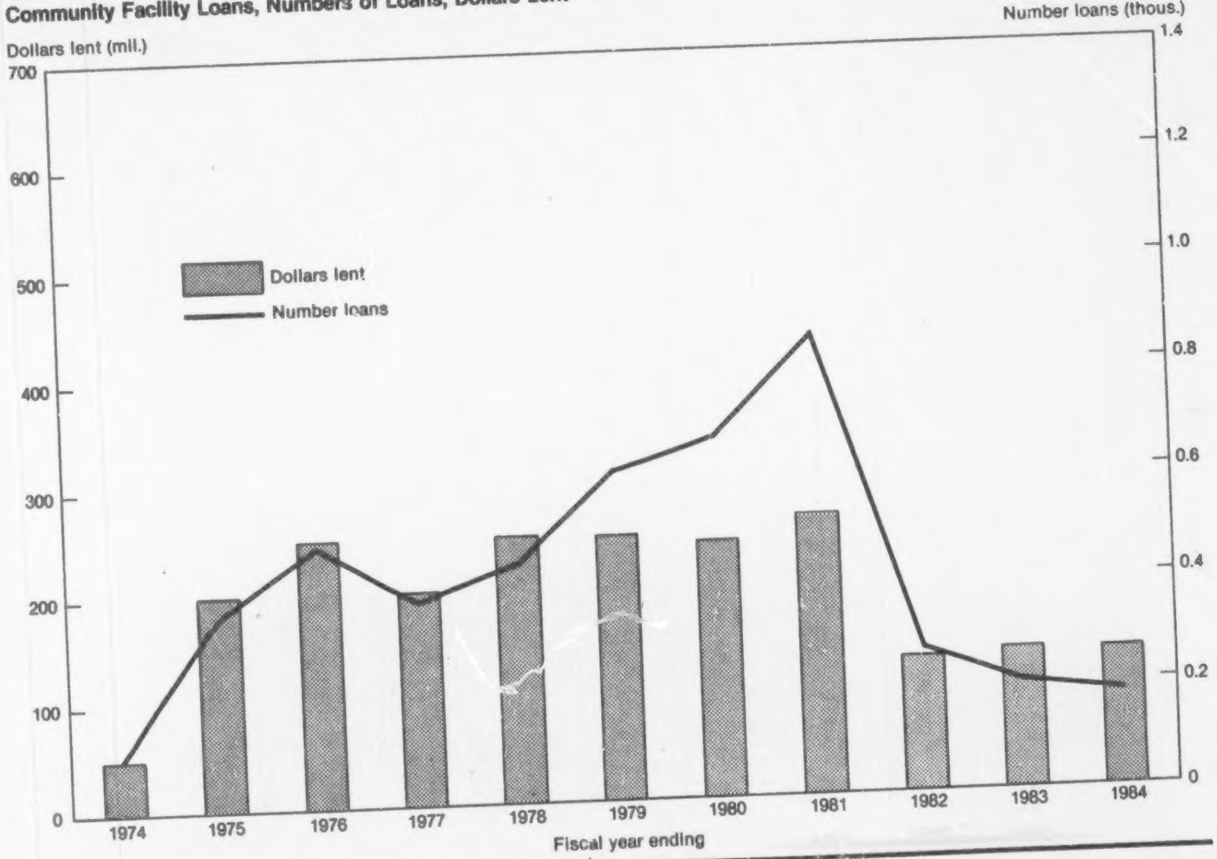


Table 12--Community facility loan program: Number of loans and dollars lent

Fiscal year	Number	Amount
1974	102	$ 49,830,700
1975	359	199,998,000
1976 & T.Q.	485	249,995,600
1977	382	199,980,800
1978	447	249,997,000
1979	615	246,998,620
1980	674	240,000,000
1981	862	260,000,000
1982	267	126,191,250
1983	208	130,000,000
1984	173	129,998,500

Figure 13

Business and Industrial Loans, Number of Loans, Dollars Lent

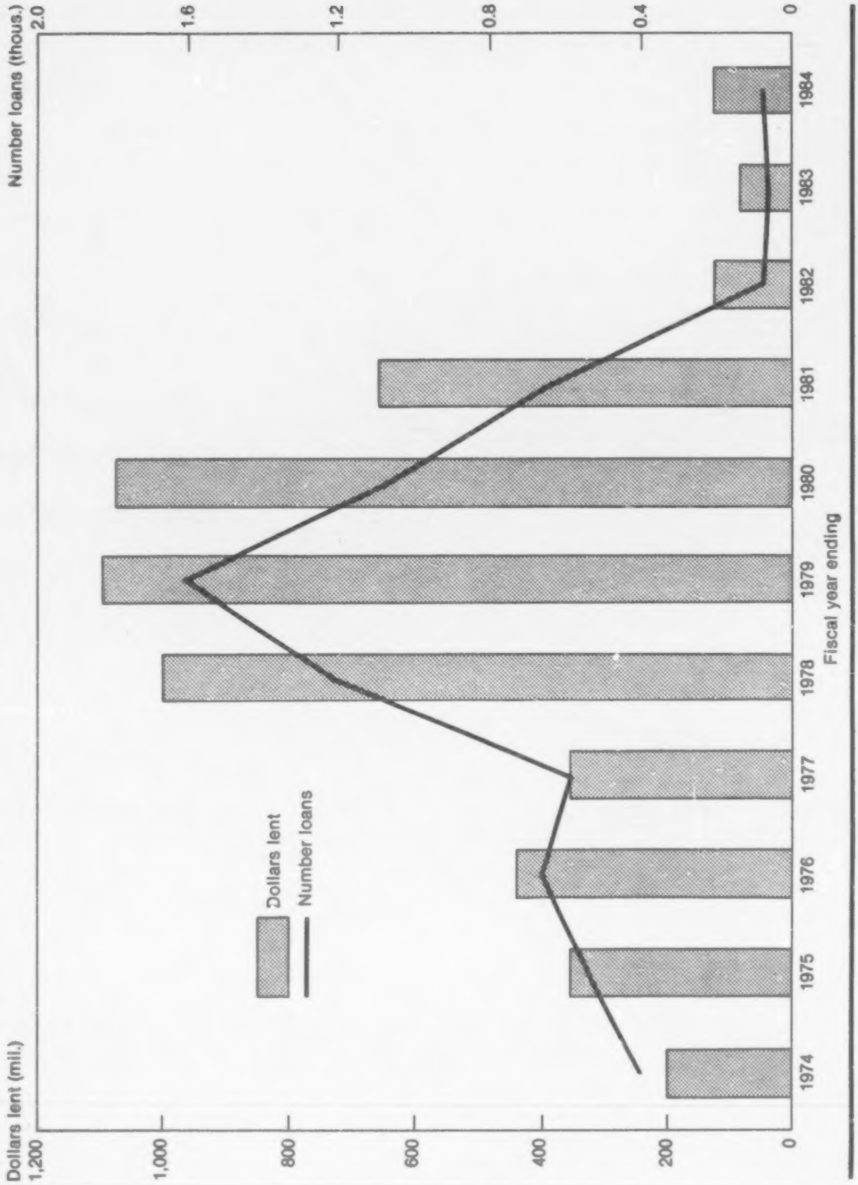


Table 13--Business and industrial development loan program: Number of loans and dollars lent

Fiscal year	Number	Amount
1974	399	$ 199,980,545*
1975	538	349,994,173*
1976 & T.Q.	663	437,498,741*
1977	584	349,987,010*
1978	1,213	999,978,030*
1979	1,609	1,097,376,903**
1980	1,160	1,073,766,920***
1981	638	652,280,250***
1982	74	125,077,575***
1983	64	81,911,810***
1984	75	124,352,250***

* Amount obligated is based on total amounts shown on face of note for all guaranteed loans.

** Amount obligated based on 90% guarantee rate of the loan.

*** Amount obligated based on actual percentage of guarantee of total loan.

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Room 717, Aronov Building
474 South Court Street
Montgomery, Alabama 36104

ALASKA
Tull Building, Palmer Business Plaza
Post Office Box 1289
Palmer, Alaska 99645

ARIZONA
201 E. Indianola, Suite 275
Phoenix, Arizona 85012

ARKANSAS
Rm. 5529, Federal Building
700 West Capitol, P.O. Box 2778
Little Rock, Arkansas 72203

CALIFORNIA
459 Cleveland Street
Woodland, California 95695

COLORADO
Room 231, #1 Diamond Plaza
2490 West 26th Avenue
Denver, Colorado 80211

DELAWARE, DISTRICT OF COLUMBIA, MARYLAND
2319 South DuPont Highway
Dover, Delaware 19901

FLORIDA
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Gainesville, Florida 32602

GEORGIA
Stephens Federal Building
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Athens, Georgia 30601

HAWAII
Room 311, Federal Building
Waianuenue Avenue
Hilo, Hawaii 96720

IDAHO
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Boise, Idaho 83702

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Champaign, Illinois 61821

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Des Moines, Iowa 50309

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KENTUCKY
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Lexington, Kentucky 40504

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Amherst, Massachusetts 01002

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East Lansing, Michigan 48823

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U.S. Courthouse, 316 North Robert Street
St. Paul, Minnesota 55101

MISSISSIPPI
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Jackson, Mississippi 39269

MISSOURI
555 Vandiver Drive
Columbia, Missouri 65202

MONTANA
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P.O. Box 850
Bozeman, Montana 59715

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100 Centennial Mall North
Lincoln, Nebraska 68508

NEW JERSEY
Suite 100, 100 High Street
Mt. Holly, New Jersey 08060

NEW MEXICO
Room 3414, Federal Building
517 Gold Avenue, SW.
Albuquerque, New Mexico 87102

NEW YORK, VIRGIN ISLANDS
Room 871
James M. Hanley Federal Building
100 South Clinton Street
Syracuse, New York 13260

NORTH CAROLINA
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310 New Bern Avenue
Raleigh, North Carolina 27601

NORTH DAKOTA
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Third and Rosser, P.O. Box 1737
Bismarck, North Dakota 58502

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Federal Building, Room 507
200 North High Street
Columbus, Ohio 43215

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Stillwater, Oklahoma 74074

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Portland, Oregon 97204

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Harrisburg, Pennsylvania 17108

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Rm. 623, Federal Building
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Hato Rey, Puerto Rico 00918

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1835 Assembly Street
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Huron, South Dakota 57350

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Wenatchee, Washington 98801

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Casper, Wyoming 82602

NATIONAL OFFICE
U.S. Department of Agriculture
Farmers Home Administration
Washington, D.C. 20250

STATEMENT OF MR. CALHOUN

Mr. CALHOUN. Mr. Chairman, I would like to just highlight a few points. We certainly appreciate this opportunity to appear before the committee and discuss the 1986 budget.

The Agency entered fiscal year 1984 with more than 1.5 million active borrowers, with insured and guaranteed loans outstanding totaling about $65 billion.

Next month, the Agency will observe the 50th anniversary of its farm credit programs. In that half century, Farmers Home has approved 9.5 million loans and grants totaling more than $124 billion. Many farmers, homeowners, and residents of rural communities have benefited from those loans and grants over the years.

We would like to point out, however, that the current outstanding portfolio is more than one-half the total Farmers Home lending over the last 50 years. What began as a helping, stabilizing effort, in a time of national economic distress 50 years ago, has gone far beyond those original expectations.

We believe that there is a need to reduce the national deficit, and it is both timely and necessary to redirect Farmers Home programs. They currently provide long-term financing for real estate, production, and emergency loans to those family-sized farmers and ranchers who are unable to obtain credit elsewhere.

We further believe that the Federal Government cannot and should not continue to be a major source of credit for the Nation. We believe this is a proper role for the private sector. The budget reflects the continuing commitment of this Administration to reducing dependence on Federal Government credit.

BUDGET REQUEST

Mr. Chairman, for fiscal year 1986, we are requesting a total budget of just under $3.8 billion. This amount will provide essential services to those in the most need while reassigning and redirecting our other sources in ways that will help reduce the huge Federal deficit.

We are well aware that some farmers are in serious financial difficulty today. We believe that FmHA is providing the essential services to those farmers through increased lending of the farm operating loans and an effectively administered policy of forbearance.

Despite these difficult times, Farmers Home has been able to stay with most of its borrowers. Special assistance through loan deferrals, rescheduling, and reamortization was provided to FmHA borrowers last year.

SPECIAL INITIATIVES

In order to provide further assistance to both FmHA borrowers and farmers with debts to other lenders, the President announced last September a comprehensive set of farm initiatives of which you are well aware.

These initiatives—the debt set-aside and debt restructuring through loan guarantees and county level financial management counseling services—are underway. They were greatly expanded last month as reflected in the Senate resolution. The programs were made more flexible and better able to meet the credit needs of farmers today. We are confident that these programs will go a long way toward meeting the farmers' needs.

The 1986 budget continues to shift our program emphasis to guaranteed lending. It provides over $3 billion in guaranteed operating loans and $400 million in insured operating loans. We look at these insured loans as being necessary for servicing existing borrowers during the transition from direct to guaranteed loans.

We are not asking for any new authority in the emergency disaster programs, because we feel that Federal Crop Insurance is now available in virtually every county where basic commodities are grown. We would hope to go that route, but still maintain some discretion to provide emergency credit where this is not the case.

RURAL HOUSING

Responsibility for providing new housing assistance for rural areas will be transferred to the Department of Housing and Urban Development. The administration has proposed that 50 percent of new assisted housing units be allocated to rural areas beginning in 1988.

We will continue to service our outstanding loans, however, and the portfolio will continue to incur costs, mainly due to the subsidized interest rates on the outstanding loans.

We have included within the Rural Housing Insurance Fund, $30 million for section 502 Insured Single Family Housing Program, to fund essential repairs to existing FmHA-financed housing. An additional $50 million is proposed in the Rental Assistance Program for subsidized units in serving extensions to existing rural projects where needed.

RURAL DEVELOPMENT

In the Rural Development Fund, we are providing $50 million for water and waste disposal loans, primarily to existing borrowers to assist low-income communities that are experiencing health and safety problems. We also are recommending $25 million for water and waste disposal grants.

In the future, we believe that communities needing this type of financial assistance will be able to obtain substantial help from other Government agencies and private credit sources. The administration has proposed that the rural share of HUD's Community Development Block Grant Program be increased from 30 to 40 percent.

SALARIES AND EXPENSES

With the reduced level of program activity that we have just been talking about, the Agency will have a diminished need for staff and administrative expenses. We have included $228 million for salaries and expenses for the new fiscal year, a reduction of $170 million. We believe this will provide adequate servicing levels to service existing loans and continue providing technical assistance to current borrowers.

In addition to this, we have initiated extensive management improvements under the Presidential Management Initiatives Program. These improvements and other cost reductions will result in budget savings. These improvements include the development of new cash management initiatives, enhanced computer and data communication technology, improved personnel management, and organizational streamlining.

We have also initiated some recent projects to augment our staff in the area of loan servicing, technical assistance for farmers, and assistance in providing quicker loan application processing. Two of these initiatives—the contracts with farm management specialists and credit counselors in our county offices, and the pilot project to contract with an approved lender in a five-State area—were part of the President's Farm Credit Initiatives announced last fall.

These and other program servicing initiatives represent an effort to improve service for borrowers and assist our overburdened staff.

Mr. Chairman, this is a brief highlight of some of the main proposals that are in our budget. If we could ask that the balance of the testimony be put in the record, I will stop at that point.

Senator COCHRAN. It will be, and we appreciate your making that presentation to us.

Before we go to questions, if it is permissible with the other Senators, I would like for us to go ahead and get into the record the statement of Governor Wilkinson. Governor, we appreciate very much your being here and your cooperation with the subcommittee. You may proceed.

Senator BUMPERS. Mr. Chairman, I am going to have to leave and go to Small Business. If I could ask just one question of Mr. Calhoun about his statement?

Senator COCHRAN. Senator Bumpers.

HUD'S COMMUNITY DEVELOPMENT BLOCK GRANT

Senator BUMPERS. What is the meaning of the 30- to 40-percent increase in the HUD, CDBG part? I don't understand that. You say that the Administration has also proposed that the rural share of HUD's Community Development Block Grant be increased from 30 to 40 percent.

Mr. CALHOUN. Yes, sir.

Senator BUMPERS. Why is that in there?

Mr. CALHOUN. Senator, what we are saying is that the agreement that the Administration has reached with the Department of Housing and Development is that a larger share of the Community Development Block Grant would be set aside or made available to go to rural areas. In the past, they have tried to get about 30 percent, as I understand it. They will be requesting 40 percent for rural areas.

Senator BUMPERS. So you are using that as some justification for cutting these programs, is that right?

Mr. CALHOUN. It is another source of funds for these types of projects.

Senator **Bumpers**. Just one other question. You have in here that the budget provides $50 million for water and waste disposal loans primarily to existing borrowers. What is the current level of funding for that program?

Mr. **Calhoun**. The current loan level for this fiscal year is $340 million.

Senator **Bumpers**. There is not much point in even asking for $50 million, is there?

Mr. **Calhoun**. We felt that there needed to be some funds there to take care of critical situations.

Senator **Bumpers**. Thank you, Mr. Chairman.

Senator **Cochran**. Thank you, Senator. Governor Wilkinson, you may proceed.

FARM CREDIT ADMINISTRATION

STATEMENT OF DONALD E. WILKINSON, GOVERNOR OF THE FARM CREDIT ADMINISTRATION

Governor WILKINSON. Thank you, Mr. Chairman, and members of the committee. The Farm Credit Administration appreciates very much, again, the privilege of testifying before this committee.

As was indicated in your opening comments, Mr. Chairman, the Farm Credit System does have $78 billion outstanding, approximately one-third of the farm debt, some 1 million loans to farmers and ranchers across the Nation.

One point that I wish to clarify at this particular point is that unlike the Farmers Home Administration, it is not our role, as the Farm Credit Administration, to speak for the private lending system, which is the Farm Credit System. We are here as the regulator of that system and as the examiner and the supervisor. The Farm Credit Administration makes no loans. We play the same role as the Comptroller of the Currency or some of the other regulators.

However, we are vitally interested, as are you, in being able to make available to you the information from this farmer-owned cooperative system that will enable you to understand the severity of the agricultural situation, especially the credit area. I think, though, it should be of interest to you to know that we are not here asking for any appropriation or for any funding. We are here to provide all the information that we possibly can.

CURRENT AGRICULTURAL ECONOMY

The situation is serious, gentlemen. Saying that, however, I can assure you that credit will be available from the farm credit institutions, the 37 banks which serve that system and the nearly 900 associations known as the production credit associations, the Federal Land Bank associations, and then, of course, the third banking group, that which serves the cooperative structure, the Banks for Cooperatives.

The farmer's ability to evidence to his loan officer that he or she can cash flow will be a key in determining the credit-worthiness of that borrower and whether that private lending institution will be able to continue to cooperate with that individual.

As we see it, approximately one-third of all of the farmers of this Nation have reached some degree of financial stress. As we look at the borrowers of the Farm Credit System as reported by those associations lending to them, there appears to be some 8 to 10 percent of their borrowers who are in jeopardy of not securing all or a major portion of the funds that they need for this particular crop year.

The Farm Credit banks' losses are generally being met by current income and by the reserves that they have built up over the years.

But one of the special concerns that I need to communicate to this committee is the mandate which you, very properly, through the Farm Credit Act of 1971, as amended, have laid upon us. That mandate is to assure you and the borrowers of the system and the investors of the system that we will do everything possible to maintain a mechanism to provide this credit from the investment community, wherever that may be in this Nation, to the farmers, ranchers, and their cooperatives.

CURRENT STATUS OF THE FARM CREDIT SYSTEM

Now, what I am presenting to you is a rather serious report in that line. Two Federal intermediate credit banks, 2 of the 12, have suffered losses in 1984 so severe that they, for the first time in the Farm Credit System history, have had to request assistance from other parts of the Farm Credit System, from the other 35 banks of the system.

Senator SASSER. How many banks did you say?

Governor WILKINSON. 37 total banks, Senator Sasser, and two of those—specifically the Federal Intermediate Credit Bank of Spokane, covering the Northwest, and the Federal Intermediate Credit Bank of Omaha, serving the Upper Midwest—have now requested assistance from other banks of the system.

Senator SASSER. Thank you.

Governor WILKINSON. At the association level, where the loans are actually made, of course, is where you find the tension at the present time. It has been necessary, either for their banks, or in some cases, for us, the regulator, to liquidate 11 production credit associations within the last 2 years. Thirty-nine PCA's have been merged with their neighboring associations in an attempt to try to merge a weak one with a strong one, so that credit may be maintained in those communities.

The 37 banks of this system are acting together now to provide the necessary resources to meet these critical needs of the banks and associations and of their borrowers.

Now, no lender, especially a cooperative lender, where the board of directors is made up of farmers, wants to see one of their borrowers or a customer go out of business, and foreclosure in these cases is a last resort.

The key factor in the decision to forbear—and that is a policy of the Farm Credit System as well as this administration—is whether there is a reasonable prospect for the farmer to repay and to continue a viable farming operation.

Furthermore, that lender has really limited ability to absorb losses to carry that nonperforming loan. The cost of forbearance is ultimately absorbed by those borrowers whose loans are sound and have been paid up. And they are usually the neighbors within that same cooperative credit association's area of service.

Five years of poor agricultural and economic conditions have resulted in historically high losses for this part of the agricultural lending group, the Farm Credit System. Net loan losses for the 37 banks of the system in 1984 were $407.6 million compared to $226 million in 1983.

The loan volume, which the system has been providing, which at one time was well over $80 billion, is now declining. It declined 3.2 percent from a year ago. This is a natural tendency, as farmers have faced this period of stress, have tightened their belt, and have attempted to use less credit because of the severe burden of the debt load.

The Federal Land Banks group, which is the dominant real estate lender, had loans outstanding of $50.7 billion and witnessed some degree of decline during this past year.

The major shock, however, was in the operating credit area. The production credit associations, which now have $17.5 billion, were down $8.6 billion. The Banks for Cooperatives, too, declined to $8.8 billion. Incidentally, that is about two-thirds of all of the agricultural cooperative debt load. The Banks for Cooperatives have witnessed a decrease there as their cooperatives also tightened their financial programs.

We look very carefully at the quality of this credit, not only from the farmer's viewpoint, but from that of the lender as well, and in our case, the regulator. Both the quality of the real estate debt—that is, the Federal Land Banks, as well as the PCA's—declined considerably in 1984.

As of December 31, gentlemen, the system institutions had classified $9.3 billion as nonperforming loans. That means that of the $78 billion, over $9 billion in loans were in some stage of difficulty, unable to provide expected interest payments or principal payments, nonperforming.

That has a traumatic effect, both on the farm, as well as on lending institutions because, of course, the payment must be made on schedule to the investment community. The system is still very capable of doing that. That is my one word of assurance that while doing its job during this period of stress, the system, with its loss-sharing program, is able to assure the investment community that there is—and will be—no default on any principal and interest payments for the Farm Credit consolidated securities.

One final point that I would like to make. It has been mentioned earlier this morning, the commercial lenders, including the cooperative Farm Credit System, have to cooperate with each other if they are to serve the best interests of the agricultural community. They must cooperate with the Government lending program, and you have heard that report, the Farmers Home Administration.

We were very encouraged with the action of Secretary Jack Block in attempting to make the President's Debt Adjustment Program more meaningful, not only to farmers but to the other agricultural lenders. It was my specific request of Secretary Block that we do everything possible to facilitate the handling of these joint guaranteed loans where a commercial lender could be involved.

We asked his consideration, and that of Mr. Naylor's, of granting approved lender status to the institutions of the Farm Credit System so that they would be able to proceed rapidly wherever possible, selecting those special loans, in moving on those loans, making their own appraisals, using their own forms, and having an expected fast turn around.

We are pleased with the decision that Secretary Block announced a week ago. I am now, as the regulator, involved in working with the system in attempting to encourage the PCA's because of the need for operating credit now, to do as much as they can in cooperating with this program.

It is difficult for them. They are already facing losses, and they must write down these loans to cash flow at 100 percent. We are encouraging that effort and hope that in some way, together, the Government lending program and the commercial lenders, may assist as many borrowers as possible.

Thank you, Mr. Chairman.

PREPARED STATEMENT

Senator COCHRAN. Thank you, Governor Wilkinson. We appreciate your statement and your cooperation to our committee. We will insert your complete statement at this point in the record.

[The statement of Governor Wilkinson follows:]

STATEMENT OF DONALD E. WILKINSON

Mr. Chairman, my name is Donald E. Wilkinson. I am Governor of the Farm Credit Administration (FCA), the independent Federal agency responsible for the regulation, supervision, and examination of the cooperative institutions that make up the Farm Credit System. With me today is Larry Edwards, Deputy Governor and Chief Examiner; and Roland Wentzel, Director, Economic Analysis Division. I appreciate this opportunity to discuss with your committee agricultural credit conditions in 1984 and the outlook for 1985.

The Farm Credit System is charged by Congress with "furnishing sound, adequate, and constructive credit" to farmers, ranchers, aquatic producers and harvesters, and their cooperatives. As a private, cooperatively owned lender, Farm Credit System institution programs must serve agricultural producers in the context of the economic and public policy circumstances that exist. The squeeze between production costs and commodity prices, the strength of the dollar, the severe weather conditions that have affected large areas of the country, and the impact of government support programs are just some of the factors that affect agricultural credit. FCA is continuously examining agricultural conditions in order to effectively supervise System institutions.

The Farm Credit System is unique in that its lending activities are almost entirely dedicated to agricultural purposes. More than any other private source of credit, the Farm Credit System's strength is tied to the strength of the agricultural sector of the American economy.

Stress on Farmers

Credit for agriculture will continue to be available from Federal land banks (FLBs), production credit associations (PCAs), and banks for cooperatives (BCs) in 1985, but marginal accounts will be closely scrutinized and cash-flow will be the key to determining creditworthiness. Fifteen to 20 percent of the farmers who borrow money have already borrowed enough to find themselves in financial difficulty, and 8 to 10 percent of farmers are in jeopardy of failing. For borrowers who are overextended, the situation is severe. Some find the amount of debt they can successfully carry is less than it once was. Others find their expectations of the 1970s have diminished along with farm profits, land values, and export markets. Many farmers have suffered from adverse weather conditions, and still others have been hit by a combination of factors.

It is important to place the current financial crisis in agriculture in proper perspective. Low profits, smaller export markets, declining land values, and high interest rates have had a negative effect. Many businesses supporting agriculture have also been hurt financially. The burden, however, has not been evenly distributed because individual financial situations vary widely.

Almost half of all U.S. farmers are essentially debt free. Even among those with debt, a high percentage manage to meet their obligations on time. However, almost one-fifth of the farm borrowers, typically concentrated in the larger sales classes and in certain regions of the country, carry enough financial leverage to have serious financial problems.

Another factor that has contributed to the current stress in agriculture has been the escalation of interest costs. Although nominal interest rates have eased since 1980, real rates have increased, adding further to the burden of highly leveraged borrowers. As a percentage of total production costs, interest costs have doubled since 1975 and now represent 16 percent of the total (see Figure 2). This increase reflects both the growing amount of farm debt and the higher interest rate on that debt.

The gap between the interest rates farmers pay and the rate of return they earn on farm assets is causing serious problems for highly leveraged farmers. For significant relief, this group must reduce its interest expenses, because even if typical asset returns double, the gap would not narrow sufficiently. Given a continuation of the high interest rates and the prospect for overall revenue performance of several agricultural subsectors to continue at disappointing growth rates for the remainder of the 1980s, the only realistic alternative for most highly leveraged farmers is to reduce the debt levels.

This point needs further elaboration because of claims that high interest rates are the cause of farm failures and the resulting proposals to remedy the plight of farmers by reducing the interest rates on agricultural loans. However, as long as net returns remain depressed for the agricultural sector, reducing interest rates will be only marginally helpful.

Figure 1

Rates of Income Return to Equity

Rate of Income Return to Equity by Debt/Asset Ratio and Cost of Debt
The rate of income return to assets is assumed to be 2%.

Debt/Asset Ratio	Interest Rate on Outstanding Debt Percent 7.0	 11.0	 15.0
0.0	2.0	2.0	2.0
0.1	1.4	1.0	0.6
0.2	0.7	-0.3	-1.3
0.3	-0.1	-1.9	-3.6
0.4	-1.3	-4.0	-6.7
0.5	-3.0	-7.0	-11.0
0.6	-5.5	-11.5	-17.5
0.7	-9.7	-19.0	-28.3
0.8	-18.0	-34.0	-50.0
0.9	-43.0	-79.0	-115.0

Rate of Income Return to Equity Capital by Debt/Asset Ratio and Cost of Debt
The rate of income return to assets is assumed to be 3.3%.

Debt/Asset Ratio	Interest Rate on Outstanding Debt Percent 7.00	11.00	15.00
0.00	3.3	3.3	3.3
0.10	2.9	2.4	2.0
0.20	2.4	1.4	0.4
0.30	1.7	0.0	-1.7
0.40	0.8	-1.8	-4.5
0.50	-0.4	-4.4	-8.4
0.60	-2.3	-8.3	-14.3
0.70	-5.3	-14.7	-24.0
0.80	-11.5	-27.5	-43.5
0.90	-30.0	-66.0	-102.0

Rate of Income Return to Equity by Debt/Asset Ratio and Cost of Debt
The rate of income return to assets is assumed to be 4.5%.

Debt/Asset Ratio	Interest Rate on Outstanding Debt Percent 7.00	11.00	15.00
0.0	4.5	4.5	4.5
0.1	4.2	3.8	3.3
0.2	3.9	2.9	1.9
0.3	3.4	1.7	0.0
0.4	2.8	0.2	-2.5
0.5	2.0	-2.0	-6.0
0.6	0.8	-5.2	-11.2
0.7	-1.3	-10.7	-20.0
0.8	-5.5	-21.5	-37.5
0.9	-18.0	-54.0	90.0

Figure 2

Selected Expenses Versus Income

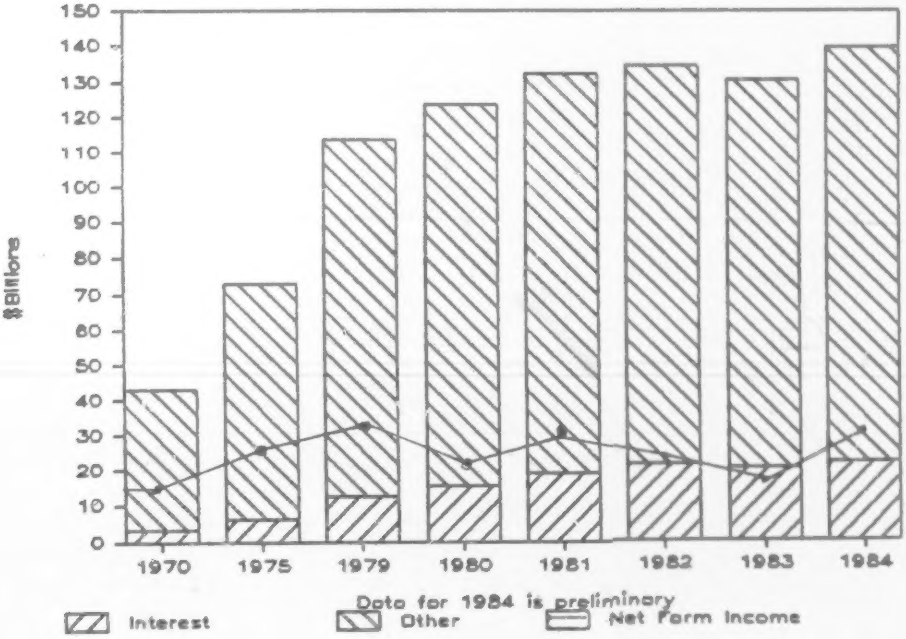


Figure 1 shows the relationship between interest rates and return on investment with respect to percentage of debt. Simply lowering the rate of interest from 11 to 7 percent will not significantly improve cash flow. For example, with a rate of income return on equity capital of 3.3 percent, reduction of interest from 11 to 7 percent will provide a small positive cash-flow (0.8 percent), while reducing interest from 11 to 7 percent on a farm that has a debt/asset ratio of 50 percent will not provide a positive cash-flow (-0.4 percent) unless return on investment is increased. With a debt/asset ratio of 50 percent on a farm with a rate of income return of 4.5 percent, decreasing interest on indebtedness from 11 to 7 percent will improve cash-flow from -2.0 percent to a +2.0 percent.

The following are conversions of percentages into billions of dollars and numbers of operators. Although they are a rough approximation because the assumptions made about sample results come from two different surveys, they provide some insight into the severity of the credit problems of agricultural producers:

	Debt/Asset Ratio			
Item	over 70%	40-70%	under 40%	all operators
			percent	
Number of operators	6.6	11.1	82.3	100.0
Operators' assets	3.9	10.6	85.5	100.0
Operators' debts	23.7	32.5	43.8	100.0
			$billion	
Operators' assets	28	76	610	714
Operators' debts	46	63	85	194
	number of operators (in thousands)			
Sales: over $250,000	19	26	97	142
$100,000 - $250,000	28	56	224	308
$ 50,000 - $100,000	28	48	251	327
$ under $ 50,000	81	133	1,379	1,593
Total number	156	263	1,951	2,370

Stress to Lenders

A small number of farmers in distress can cause serious problems for lenders. Most lenders have relatively small provisions for losses built into the interest rates they charge. Reserves built up over the years are adequate to handle losses in isolated situations, but they can be depleted quickly if losses are widespread.

From a lender's point of view, the percentage of total debt owed by highly leveraged farmers -- those with debt-to-asset ratios above 40 percent -- takes on a greater significance than the relatively small number of farmers in that category.

They represent about two-thirds of total agricultural debt. Clearly, massive defaults by these borrowers would threaten many agricultural lenders. It could also cause an overloading of the farm land market, excessively depressed land values, and destruction of balance sheet values for other borrowers. Various proposals for government assistance to help farmers to restructure their debts or achieve an orderly exit from farming are not only a means for assisting farmers but a means of shoring up financial institutions.

The more immediate problem for the lender is the loss of interest income when a borrower gets in trouble and isn't able to make payments. The loan is still out there, but it isn't earning a return. In the case of Federal land banks (FLBs) and production credit associations (PCAs), the vast majority of their loan funds come from the sale of System securities. Those securities must be redeemed and interest and principal paid in order to maintain investor confidence. If it is not, interest rates will rise and availability of funds could be curtailed. The immediate consequence would be higher interest rates charged to all borrowers to make up for losses in earnings.

On December 31, 1984, PCAs reported $2,365 million in nonperforming loans and these institutions were holding $182.3 million in acquired property.

For the same period, FLBs reported $2,869 million in nonperforming loans and FLBs were holding $313.8 million in acquired property. Combined loan losses for 1984 were $375.6 million compared to $252.7 million in 1983.

With the exception of one Federal intermediate credit bank, losses of the 37 Farm Credit banks are being met with current income, and loss reserves prudently built up over the years have actually increased. Earnings of the banks declined from $994 million in 1982 to $543 million in 1983 to $441.6 million in 1984. Earnings are a major factor in maintaining investor confidence.

Stress at the association level of the Farm Credit System has led to decisions to liquidate 11 production credit associations within the last 21 months. In addition, in the first 11 months of 1984, 39 PCAs were merged with neighboring associations to strengthen their capital positions. The Farm Credit Act requires production credit associations to maintain at least a 10-1 ratio of debt to capital. While the System as a whole is well capitalized, individual associations must be liquidated if they are unable to meet their financial commitments or if they are unable to maintain a sufficient debt/capital ratio.

In some instances, liquidations, mergers, and other association problems require investment by Federal intermediate credit banks (FICBs). Where association losses have been severe and FICB investment has been necessary, the resources of an FICB may be heavily strained. The 37 banks of the Farm Credit System act together to provide the necessary resources to meet the critical needs of individual System banks and, of course, all banks are responsible for the repayment of Farm Credit securities.

Working with Troubled Borrowers

What must be recognized is that both lenders and borrowers are affected and their interests appear to be in conflict. But lenders, as well as borrowers, had their expectation for the 1980s proved false and both are experiencing losses as a result. Neither borrowers nor lenders foresaw that money borrowed before inflation was brought under control could not be repaid once inflation was curbed. Nor can more credit be a substitute for increased income under present circumstances.

No lender wants to see a customer go out of business. Foreclosure is the last resort for any lender and particularly for a borrower-owned credit cooperative. Consequently, FLBs and PCAs operate under a policy that encourages forbearance. Forbearance means loan officers work closely with troubled borrowers on a case-by-case basis to consider whether to renew, reschedule, defer payment, reamortize, liquidate some assets, or otherwise continue credit. It means that foreclosure is to be considered only as a last resort.

The key factor in the decision to forbear is whether there is a reasonable prospect for the farmer to repay and to continue a viable farming operation, and this decision must be made on the basis of a realistic analysis of the borrower's ability to generate net income from agricultural operations under current and foreseeable conditions. Forbearance is appropriate when the profitability of a farm operation is temporarily low and the operator is strong enough financially not to pose an excessive credit risk. Where there is no reasonable likelihood of recovery, continued extension of credit will simply increase losses to the borrowers and the lender and will exhaust the remaining equity of the borrower.

Furthermore, even a borrower-owned lender like an FLB or PCA has a limited ability to absorb loan losses or carry nonperforming loans. In a lending cooperative, the cost of forbearance actions is ultimately borne by those borrowers whose loans are current, eventually resulting in higher interest rates and more serious problems for the institutions and their customers.

The problem for both borrowers and lender has now become more critical because many lenders have exhausted their financial capacity to carry large numbers of delinquent borrowers. Some borrowers who would probably be carried under normal conditions cannot be because mounting loan losses, falling earnings, and depleted reserves for losses have limited their lender's ability to forbear. Resource limitations will force lenders to concentrate on those troubled farmers who have traditionally demonstrated strong management skills and have a reasonable chance to survive with some additional financial assistance.

Agricultural Credit Conditions

A combination of world recession, domestic fiscal and monetary policies, and record-breaking world crops pushed the U.S. farm economy into recession early in this decade. The farm sector as a whole has seen 5 consecutive years of relatively low income, particularly in real terms, despite unprecedented levels of farm program outlays.

Nevertheless, the remarkable ability of the U.S. agricultural sector to transform itself from a situation of scarcity to one of surplus in only 1 year's time was demonstrated in 1984. The combination of the 1983 Payment-in-Kind (PIK) Program and drought in much of the Corn Belt drastically reduced supplies of feedgrains in 1983. In response to higher prices and less attractive government control programs, farmers planted 11 percent more acres to the major crops in 1984 than in 1983. Despite less than ideal weather patterns, including a cool, late spring and a late summer drought in some areas, near average yields led to a sharp increase in production for the year.

As 1985 unfolds, there is more than a usual amount of interest in the outlook for agriculture and agricultural finance. A continuation of the economic problems that have characterized much of agriculture for the past 5 years will no doubt result in increased farm foreclosures and more loan losses for agricultural lenders. Unfortunately, one good year, while it would be very welcome, will not offset the accumulated stress. Several good years in succession are needed for many operators to reestablish their financial footing.

Therefore, it is likely that 1985 will be a pivotal year for agriculture because it will determine how lenders choose to deal with troubled borrowers. Most lenders have already taken steps to clean up their agricultural loan portfolios, but the buildup of nonperforming loans over the past several years makes it difficult to accomplish this task quickly. In addition, lenders are continuing to stay with troubled farmers where there is a reasonable likelihood that they can work their way out of their difficulties. Consequently, large loan losses will probably continue for at least 1 more year.

We expect there will continue to be strong pressure on Congress to adopt a credit assistance program as part of the 1985 Farm Bill. At the same time, there will be resistance on the part of the Administration to endorse any program that increases governmental spending for agriculture and strong pressure to significantly reduce total outlays for agricultural programs.

Most lenders have no choice but to evaluate requests for new loans and renewals very carefully in 1985. The next 2 to 3 years will be critical to U.S. agriculture. The trend is toward decreased farm numbers, low rates of return on land, narrow profit margins, and increased pressures to adopt labor-saving and cost-efficient technologies. Farmers should expect to operate using less debt, not more, in this environment.

The means by which farmer cooperatives have responded to the weak performance of the agricultural economy is illustrative. However draconian they may appear to be at present, these actions have been essential to their long-term survival. Some cooperatives have reduced their operations by selling off nonessential assets, reducing member services, and cutting debt. In other instances, mergers have been pursued to create financially stronger cooperatives.

The combined effect of these strategic actions will work a profound change within the cooperative community. Fewer cooperatives will ultimately emerge from this period of often wrenching adjustment, but those that do will be leaner and better positioned for the next upturn in the agricultural economy's business cycle.

Financial performance of the nation's 100 largest cooperatives clearly reflects the results of these strategic actions. Despite lower revenues of $48.8 billion (down 9 percent from 1982 to 1983), net margins were dramatically higher. Another sign of increased strength is the greater cash-flow as a source of funds and a decreased reliance on debt. As a result, equity, as a proportion of capital, increased from 30.0 percent to 31.6 percent during fiscal year 1983, while debt decreased from 43.7 percent to 41.1 percent.

There is a strong likelihood that this trend will continue through 1985.

However, most of the easy belt-tightening measures have been taken, so further changes in capital structure will not be so marked as during the 1982/83 period. Over the longer term, through 1990, it is likely that an expansion phase of agriculture's business cycle should emerge and cooperatives will require heavier borrowing for both short- and long-term debt purposes.

Agricultural producers and lenders will need to follow a pattern of retrenchment similar to agricultural cooperatives. Downsizing an industry as large as agriculture will be a formidable challenge for policymakers, as well as for the financial institutions and other businesses serving agriculture. In the face of present economic pressures and long-term prospects, the course followed by agricultural cooperatives suggests the most reasonable and prudent course of action.

Farm Income and Expenses

U.S. Department of Agriculture economists estimate 1984 net farm income of between $29 billion and $33 billion, nearly double the $16 billion recorded in 1983, but the figures are somewhat misleading for both years. The $16 billion for 1983 was not as bad as it seemed and the estimates for 1984 will not be as good as they seem. After adjusting for PIK payments and the dramatic change in crop inventories over the 2 years, the income figures are not that far apart -- $22-$23 billion.

The method used to incorporate farm program benefits dramatically affected the 1983 and 1984 net farm income estimates. Farmers had the option of receiving their 1983 PIK commodities in either 1983 or 1984. Had the total PIK-generated income of farmers been reflected in 1983, rather than spread over 2 years, total net farm income would have remained fairly flat between 1982 and 1983 and would not show the nearly doubling that USDA projects for 1984. In dollar terms, rather than jumping from $16 to $31 billion, total net income more appropriately advanced from about $21-$22 billion in 1983 to approximately $25 to $26 billion in 1984.

Farm expenses rebounded in 1984 as farmers brought land back into production that had been idled by the PIK program. Of the total increase in farm expenses in 1984 over 1983, approximately one-half is due to increased production. The top end of the projected range for production expenses represents an 8-percent increase over 1983. The two most rapidly increasing costs in 1984 were for fertilizer, approximately 20 percent, and for seeds, approximately 17 percent, but these expenditures were abnormally high because farmers were bringing back into production acreage that had been idled.

Interest expenditures continued to represent a major expense item for the agricultural sector as higher interest rates on outstanding debt caused a 5- to 9-percent increase for 1984. Nonreal estate interest expense increased 8 to 12 percent and real estate interest expenses increased 2 to 6 percent. At the same time, capital expenditures increased only slightly in 1984.

Farm Assets and Debt

Asset values are projected to have changed very little in 1984 because of inventory rebuilding in the crop sector and reduced liquidations in the livestock sector. Partly offsetting these positive factors were stable-to-declining land values and stagnating machinery inventories. Given the pressure on farm incomes, increases in asset values will continue to lag behind the inflation rate.

Figure 3

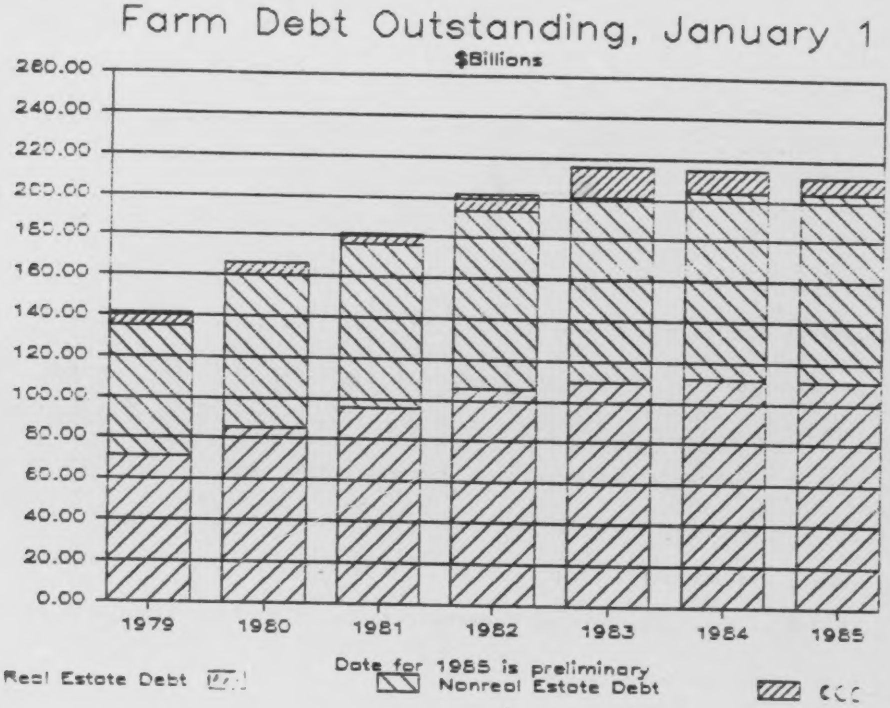
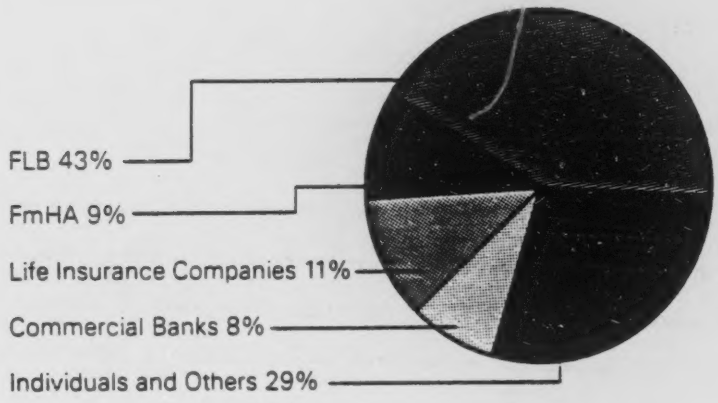


Figure 4

Farm Real Estate Debt Market Shares

January 1, 1984



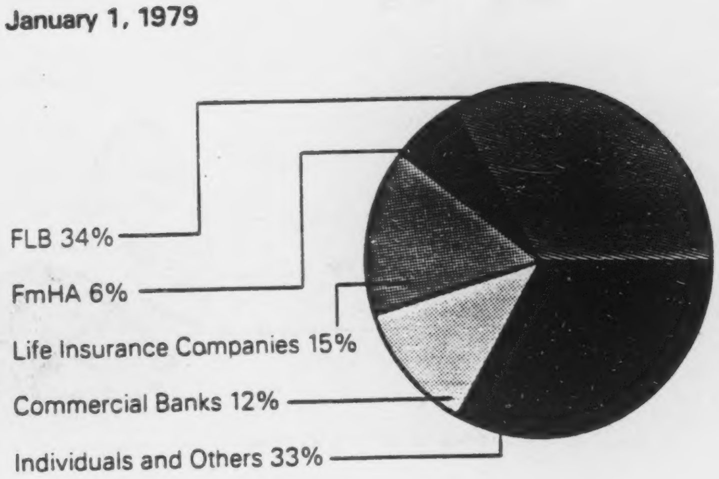
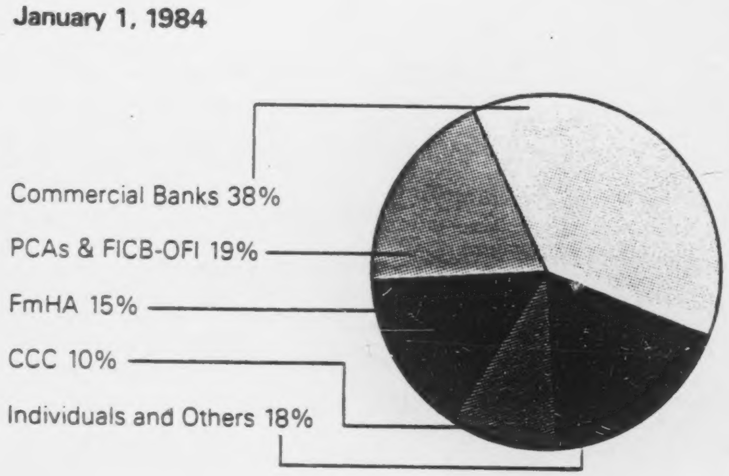
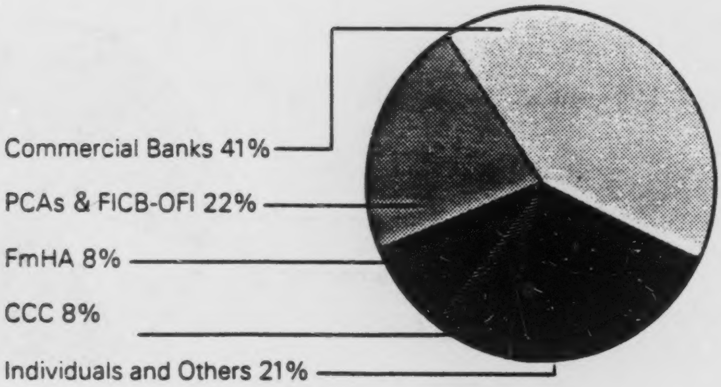


Figure 5

Farm Nonreal Estate Debt Market Shares





January 1, 1979

For 1984 as a whole, U.S. real estate values were expected to register a 1- to 2-percent decline. Following a 0.6-percent decline in 1983, agriculture real estate values have now declined 10 percent below their January 1, 1981, levels. Land price declines have varied widely across the country. The sharpest declines have been in the Corn Belt where land values in some locations have declined as much as 30 to 50 percent by early 1984 from their 1981 peaks.

Many heavily leveraged farm operators have been forced to place land on the market, putting additional downward pressure on land prices in some areas. Significant increases in lender-acquired properties through foreclosure and other means have also contributed to price weaknesses. The number of land sales decreased sharply in 1984 while the time required to sell increased. Nevertheless, there are signs that the rate of decline in land prices has slowed and that the market is approaching a bottom.

Figure 6

Debt-to-Asset Ratio of Farm Sector
January 1, 1979-1985

Year	Ratio
1979	0.161
1980	0.165
1981	0.167
1982	0.186
1983	0.206
1984	0.208
1985	0.207

Data for 1985 are preliminary

In other asset categories, crop inventories are expected to increase substantially, possibly reaching the pre-PIK level of January 1, 1983, of $41 billion. Livestock inventories are expected to stabilize near the $50-billion level of a year ago. Also, continued depressed farm equipment purchases and machinery prices suggest those asset values will hold constant or weaken slightly.

Debt levels are expected to register a modest decrease in 1984, representing the net effect of increased nonreal estate borrowing, excluding Commodity Credit Corporation (CCC) loans, meager increases in farm real estate debt as a result of high interest rates and declining values, and sharp decreases in CCC loans as delivery of PIK entitlements took place.

U.S. Agricultural Exports

Fiscal year 1984, with $38 billion in exports compared with $34.8 billion in fiscal year 1983, marked the first increase in the value of U.S. agricultural exports since fiscal year 1981. However, the increase in value reflects increases in price. The volume of exports actually declined 1 percent.

The lackluster performance of export volume, which was off 20 million metric tons from its 1980 peak of 164 million metric tons, was caused by several factors in the agricultural sector, by the continued strength of the U.S. dollar in international currency markets, and by the general worldwide recession that has limited the ability of importing nations to purchase farm exports.

Furthermore, U.S. agricultural policies have encouraged a permanent increase in global production capacity so that the capacity for growth in exports, even if there were a sudden plunge in the value of the U.S. dollar, has been greatly diminished for many years to come.

Government Programs

Lending activity within the major farmer programs of FmHA increased significantly in 1984, primarily because of a surge in disaster emergency loans, the reinstitution of the economic emergency program, and record lending levels in the operating loan program. FmHA now holds 9 percent of real estate debt and 15 percent of the nonreal estate debt nationally. In some states, FmHA lending represents more than 50 percent of the nonreal estate debt owed to lending institutions. FmHA closed 142,514 applications for real estate, operating, and emergency loans amounting to $4.0 billion -- one-third more than was obligated in 1983.

A growing number of farmers turned to FmHA as a source of loans for operating funds when they were deemed not creditworthy by commercial and Farm Credit System lenders. The Emergency Agriculture Credit Act of 1984, passed in April, doubled the lending limit for FmHA operating loans (OL) from $100,000 to $200,000. As a result, OL budget authority was exhausted by July, which meant that additional funds had to be reallocated from other programs. At the end of FY 1984, OL obligations totalled $1.96 billion, compared to $1.7 billion for FY 1983.

The economic emergency loan program (EE) was the center of significant controversy, with FmHA finally allocating $310 million in direct loans and $290 million in guaranteed loans. The $600 million was obligated based on a court order and was followed by an attempt to limit direct loans to $50 million.

In all, 2,092 of the Nation's 3,000 agricultural counties were eligible for emergency disaster (EM) loans as a result of drought or flooding, which caused applications to triple and loan volume to double to $1.05 billion in FY 1984, compared to $566 million in FY 1983.

FmHA loan delinquencies remained at historically high levels, but the number of borrowers discontinuing farming declined moderately. The 1984 delinquency rate peaked at 43.2 percent in January and declined to 29.6 percent by the end of the fiscal year. The FmHA delinquency rate peaks in January because that is when most FmHA loan payments are due. On January 31, 1985, the FmHA delinquency rate increased to 44.8 percent.

Commodity Credit Corporation loans outstanding reached a peak of $20 billion in early 1983 but decreased to $8 billion as of August 31, 1984, because of the PIK program and lower participation rates in the programs. CCC lending climbed seasonally through the end of 1984 and the first quart of 1985, but then dropped to levels closer to year-earlier levels by the end of summer.

Outlook for 1985

Income and Assets

Cash receipts for 1985 should incease 2 to 3 percent, but production expenses are projected to increase 5 percent, resulting in a decline in net income performance. Overall revenue performance for several agricultural subsectors is likely to produce disappointing growth rates for the remainder of the 1980s because of the failure of U.S farm exports to resume a growth pattern adequate to avoid burdensome overproduction, and because there has been a permanent change in the tastes and preferences of Americans for red meat and dairy products that will require further downward adjustments in the livestock and dairy sectors.

Total net farm income for the rest of the decade, while it may fluctuate from one year to the next, is likely to continue downward, because increases in production costs will outgain increases in gross revenue. In real terms, net income will slide to levels well below those of the early 1970s and even the late 1960s. One result of the continued decline in farm income will be that less efficient, high-cost producers will be forced out of farming, and those producers remaining are likely to obtain some growth in average net income.

Farm Assets and Debts

By the end of 1985, the retrenchment in land values should have run its course and there may be some modest increases. However, the continued pressure on net farm income will delay any significant turnaround in land values. Crop inventories will remain volatile but will trend upward as volume gains outweigh prices. Livestock inventories, however, are likely to decrease and machinery inventories are not likely to grow. Taken together, the prospects for farm assets are for stagnant to slightly growing values for the rest of the 1980s.

Both real estate and nonreal estate debt are likely to be relatively flat for 1985 compared to 1984. Over the longer term, farm debt is expected to show patterns similar to the growth of assets, with real estate debt growing at about the same rate as land values, while nonreal estate debt is likely to grow at higher rates reflecting production gains. Farm programs designed to reduce excess crop inventories have added volatility to the nonreal estate debt situation over the past few years. This trend probably will continue over the remainder of the decade because of the farm sector's capacity for excess production.

Given the expectations for farm sector asset values and liabilities, equity values are expected to continue to erode through 1985 and will lag behind the rate of inflation for the remainder of the 1980s.

U.S. Agricultural Exports

The outlook for the 1984/85 global crop production is mixed, but a return to the world trade environment experienced in the 1970s is unlikely for the remainder of the 1980s. The factors retarding growth of American farm exports are not beyond the ability of the United States to improve, but actions will need to be taken with respect to domestic economic policies, international debt burdens, and trade policies and agreements for there to be an improvement.

Popular attention has focused on the strength of the U.S. dollar as the cause of disappointing agricultural exports, but like most conventional wisdom, the strong-dollar/low-exports logic captures only part of the truth. For some agricultural products, it may be questionable even to talk about the U.S. being price competitive against certain exporters in the short run. For example, some nations are not equipped to store their exportable commodities and are willing to undercut prevailing prices to move whatever is available for export.

The critical element in U.S. exports is the signals being given through world markets to producers in various countries to change their output.

One of the most damaging aspects of the rising U.S. dollar over the past several years is that it has translated the fixed loan rate feature of our domestic farm programs into a world price structure favorable to other nations. Foreign producers know that any combination of large supplies and/or weak demand will drive prices down, but only so far as our loan rate, at which point U.S. supplies will be effectively withdrawn from the market. Because U.S. exports are such a large proportion of internationally traded commodities, the loan rate provides strong support to a trading price at the loan rate level.

U.S. agricultural policy has done for international markets what it has been unable to do for American -- reduce agricultural price risk. Foreign producers have responded by expanding production and eroding the U.S. share of world trade and will continue to do so as long as foreign production costs are lower than the supported trading price, which is our loan rate.

What is significant for U.S. agriculture is that these developments have encouraged a permanent increase in global production capacity. Changing the value of the dollar will not change this, because long-term adjustments have been activated that will continue to forge a new market reality.

Government Programs

For 1985, the FmHA budget reflects the Administration's philosophy of limited Federal involvement in credit markets with greater emphasis placed on guaranteed loans. Nearly all the budgeted guaranteed loans will be applied to the debt adjustment provision of the President's agricultural credit relief program, which is intended to assist farmers and ranchers who have traditionally demonstrated good management skills but who need some temporary relief. While this program will provide some assistance to this group, it will have a minimal effect on the total problem because $5 to $6 billion in agricultural loans are delinquent.

Participation rates in the commodity programs will probably run above 1984 levels, because commodity prices are considerably lower during signup and there is little optimism. While it is uncertain how many farmers will use CCC as a marketing tool to shore up sagging prices, farmers can be expected to take out more CCC loans in the year ahead as a way of supporting market prices. However, if market prices are pushed up closer to target price levels, CCC loans outstanding may not increase very much in 1985.

The development of the 1985 Farm Bill will involve a debate of unusual significance. Conditions in the agricultural economy have precipitated substantial changes. The overall budget exposure of the U.S. Treasury due to farm programs, which was insignificant relative to other Federal activities when past policy decisions were made, has increased dramatically.

The policy arena of agriculture is vastly different from what is has been in the past. The new reality requires the agricultural community to recognize that broader fiscal and monetary policies in a global perspective could have more effect on agriculture than what is ultimately written into the 1985 Farm Bill.

Condition of the Farm Credit System

The increase in Farm Credit System lending activity that was projected for 1984 failed to materialize and there was a continuation of the retrenchment that began in 1983. Four factors explain the stagnation in System loan volume: 1) the continued strain on cash-flow that caused farmers to restructure their debt and pay down loans; 2) the effect of continued downward readjustment of land values resulting in a low turnover rate in the real estate market; 3) stronger controls exercised by individual associations to reduce overall risk and improve the quality of their loan portfolios, and 4) competitiveness of commercial banks in seeking new creditworthy borrowers.

Overall, the financial strength of the Farm Credit System has been maintained. The 37 banks reported total net income for 1984 of $441.6 million. However, individual banks and production credit associations have experienced severe stress.

Five years of poor agricultural economic conditions have resulted in historically high losses for Farm Credit System institutions. In a survey of System banks, 10 of the 12 districts describe 1984 as a year of either unchanged or worsened credit quality. For 1985, 11 districts projected that net farm earnings and repayment ability of their member borrowers will be comparable to 1984. Districts with dairy farming as a principal agricultural enterprise all reported difficulty, with no improvement likely in 1985. Grain farmers' earnings varied regionally, with districts in the Midwest and South reporting lower earnings, while Eastern districts reported some improvement.

The banks characterized their most serious troubled borrowers as highly leveraged, with minimal equity and limited cash flow to repay their current debts. To alleviate their situation, many System borrowers are liquidating all or a portion of their assets, sometimes at their lenders' insistence. Also, many hard-pressed farmers are limiting expenditures and seeking to restructure their debt.

During 1984, FCA has concentrated substantial efforts in dealing with the problems of financially troubled PCAs. These are PCAs that have experienced serious loan losses or are carrying a significant amount of nonperforming assets in their loan portfolios. Some common factors associated with these troubled PCAs include lending to highly leveraged borrowers, borrower exposure to several successive years of depressed agricultural incomes, and weakened PCA board direction, management, and supervision.

Among the remedies available to deal with financially troubled PCAs are merger, consolidation, loss-sharing agreement activation, financial assistance by FICBs, and when no other viable alternative is available, either voluntary or involuntary liquidation. The specific course of action taken depends on the probable future financial and operational viability of the PCA, the degree of future financial risk to PCA stockholders, the strength of the Federal intermediate credit banks, and on the effect other action will have on the availability and quality of credit services to present and future creditworthy borrowers in the territory.

In order to determine the ability of the production credit associations and the Federal intermediate credit banks to use the available remedies short of liquidation and retain their ability to provide effective credit services through the next 5 years, the Farm Credit Administration has undertaken a financial feasibililty study that will be completed by April 30. This major undertaking will provide the Governor with objective criteria for determining whether mergers, consolidations, and territorial realignment requests should be approved.

SYSTEM FUNDING

For the second consecutive year, the amount of System bonds maturing exceeded its new obligations, causing the total System bond portfolio to decline by nearly $1.4 billion. At the 16 pricings of 1984, the System issued a total of $37 billion in new bonds, replacing $38.4 billion of maturing issues.

The System's participation in the bond market has shrunk considerably over the last 3 years compared to the late 1970s and 1980s. At the end of 1984, the System's total bond portfolio of $67.5 billion was nearly $3 billion smaller than at the end of 1981. This is quite a reversal from the 1979-1981 period when an average of $10 billion in new money was raised each year.

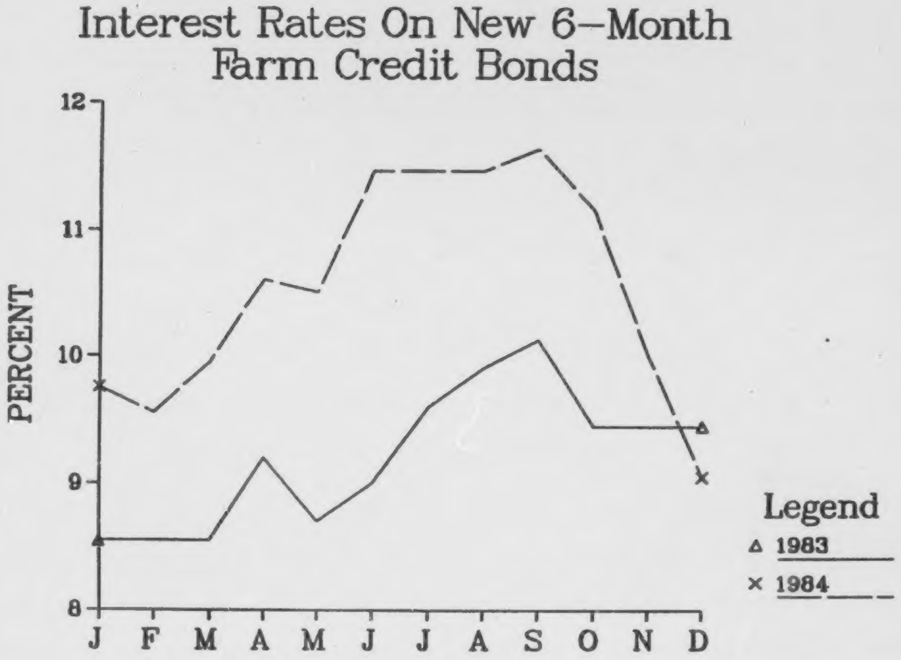
Rates on System short-term bonds were marked by several peaks and plateaus during 1984 before receding considerably at yearend to near the same level as the beginning of the year. Rates on the monthly issues of 6- and 9-month bonds ratcheted upward throughout most of the year, with increases coming in rather large spurts. In the first quarter, short-term rates hovered in the 9.5- to 10.0-percent range. Fears of an overheated economy and a tightening of the money supply by the Federal Reserve pushed rates up to 10.5 to 10.75 percent in the second quarter and eventually to a 2-year high of 11.45 to 11.95 percent in the third quarter. When it appeared that the Fed was becoming slightly more accommodative and that economic growth was slowing to a more sustainable level, rates softened late in the year, declining to lows of 8.0 to 8.4 percent.

Because short-term rates climbed higher through most of the year, the average cost of the FICB portfolios rose by nearly 75 basis points to 10.98 percent. The average cost of the BC portfolios spurted around midyear and rose a total of 50 basis points over the course of the year to 11.31 percent.

Rates on the System's new term issues were slightly less volatile than the short-term obligations. For the first 7 months, rates on a new 2 1/2-year bond rose steadily from 10.85 percent to 13.2 percent; by the October bond pricing, the rate on a comparable new issue had retreated to 12.0 percent. With a large concentration of term bonds in the FLB portfolios, changes in the average cost of their portfolios were less significant than for the FICBs and BCs. Many of the term bonds issued in 1984 replaced maturing bonds that were issued 2 to 4 years ago when term rates were significantly higher. This helped counteract the increased costs associated with the short-term issues, leaving the average FLB portfolio cost at 11.9 percent, virtually unchanged from the beginning of the year.

All three systems could have an opportunity to reduce their average funding costs in 1985, particularly in the first half of the year. Between January and June 1985, nearly one-half the FICB and BC portfolios will mature, a large portion being $10.8 billion in short-term issues at an average cost of 11.34 percent. Considering that the pricing of new System short-term bonds track very closely to Treasury issues, and that the yield on 6-month T-bills is expected to remain well below 11 percent in the first half of 1985, both the FICBs and BCs could experience a sizable decline in funding costs. The FLBs will retire $7.8 billion in term bonds over the course of 1985 at an average cost of 12.3 percent. As in 1984, very little movement in FLB funding costs is anticipated.

Figure 7



Loan Volume*

The Farm Credit System had $78.0 billion in loans outstanding on December 31, 1984, 3.2-percent less than a year ago.

Total FLB loans outstanding were $50.7 billion by December 31, 1984, 0.7-percent less than at the end of 1983. The number of FLB loans outstanding also decreased 1.3 percent from year-earlier levels to 653,373. The average FLB loan was for $77,619, 0.6-percent more than on December 31, 1983.

PCA loans outstanding stood at $17.6 billion at the end of 1984, down 8.6 percent from the end of 1983. The number of PCA members with loans

* Data excludes nonperforming loans.

outstanding also decreased, with 8.3-percent fewer borrowers during the year ended December 31, 1984, than a year earlier.

FICBs had an additional $898.9 million in loans outstanding to other financial institutions (OFIs) on December 31, 1984. This was 5.7-percent more than on the same date a year earlier.

BCs had $8.8 billion in loans outstanding on December 31, 1984, a decrease of 6.0 percent from year-earlier levels. The number of cooperatives with loans outstanding decreased from 3,313 to 3,163, reflecting in part the reduced number of agricultural cooperatives.

Figure 8

System Lending Activity as of December 31*
$ Thousands

Federal Land Banks	1983	1984
Number of loans outstanding	662,276	653,373
Number of members with loans outstanding	629,968	629,244
Amount of loans outstanding	$ 51,077,833	50,714,409
Number of loans made during year	42,335	38,709
Amount of loans made during year	$ 4,785,275	4,309,843
Production Credit Associations**		
Number of members with loans outstanding	340,831	312,680
Amount of loans made during year	$ 30,242,308	28,340,983
Amount of loans outstanding	$ 19,263,484	17,600,270
Federal Intermediate Credit Banks		
Loans made to other financing institutions during year	$ 1,713,342	1,775,786
Loans outstanding to other financing institutions	$ 849,995	898,855
Banks for Cooperatives		
Number of cooperatives with loans outstanding	3,313	3,163
Amount of loans outstanding	$ 9,319,250	8,760,063
Amount of loans made during year	$ 29,171,033	31,800,349

* Data excludes nonperforming loans.
** PCAs obtain loan funds from FICBs.

Credit Quality

Financial stress in the agricultural sector has carried over to the banks and associations of the Farm Credit System. Eleven PCAs are in liquidation and a number of associations have been merged to improve their capital position. Two Federal intermediate credit banks will require financial assistance to remain viable. The Farm Credit System will need to provide \$1.0 to \$1.5 billion in financial assistance to offset the effects of high concentrations of nonperforming loans that existed at the end of 1984. A further deterioration in the financial condition of agriculture in 1985 will aggravate the problems being experienced by Farm Credit System institutions.

After a thorough study by the Farm Credit Administration on how the Farm Credit System can more accurately identify and report nonperforming loan information, guidelines were issued on May 30, 1984. These guidelines are intended to provide more uniformity in reporting information, but more importantly they provide the management of System institutions with the information they need relating to the performance of their loan portfolios.

The quarterly loan performance reports generated by the reporting system replace the information contained in the quarterly credit monitoring reports. Nonperforming loans consist on nonaccural, restructured, other restructured- or reduced-rate, and other high-risk loans. Nonaccrual loans are those in which interest has been suspended because either 1) the collection of the outstanding balance is in doubt; 2) full collection of further accurals of interest is in doubt; or 3) principal and interest payments are in default or past due 90 days, unless it is determined through a quarterly evaluation that the loan including future interest is well secured and fully collectible.

Other nonperforming loans include loans past due 90 days or more on which exceptional concessions have been made to borrowers for economic or legal reasons; loans in bankruptcy or foreclosure; loans considered vulnerable to being charged off; and loans that exhibit severe credit weaknesses. Although the financial impact of other nonperforming loans is not as severe as that of nonaccrual loans, there is a possibility that they may have to be recorded as nonaccural in the future and they may, therefore, raise concern among investors.

The following table summarizes data on nonperforming loans in the Farm Credit System as of December 31, 1984.

NONPERFORMING LOANS IN THE FARM CREDIT SYSTEM
December 31, 1984

(in millions)

	Nonaccrual	Other Nonperforming	Total Nonperforming
BC	15	523	538
FLB	1,116	2,869	3,985
FICB	281	2,166	2,447
PCA*	637	1,728	2,365

*Estimate. Reports on PCAs in five Farm Credit districts have not been received.

Despite the burden of nonperforming loans, the 37 Farm Credit banks reported a net profit of $441.6 million during 1984. This represents a decline of 18.7 percent from 1983 to 1984 and follows a 45-percent decline from 1982 to 1983. Net income of $441.6 million represents a return on assets of 0.52 percent, compared to 0.64 percent in 1983 and 1.19 percent in 1982.

The economic impact on PCAs is more severe than on the 37 banks. Net losses for PCAs in 1984 were $10.3 million, following net gains of $77.2 million in 1983 and $260.9 million in 1982.

Net loan losses for 1984 for all Farm Credit System institutions totaled $407.6 million. The following table summarizes net loan losses:

NET LOAN LOSSES IN THE FARM CREDIT SYSTEM, 1984
(in millions)

BC	$ 10.1
FLB	90.4
FICB	21.9
PCA	285.2

Despite the increase in losses, the Farm Credit System's combined allowance for losses on loans is $1.178 billion, including $480.4 million in PCA loss reserves.

The overall capital position of the Farm Credit banks remains strong and has improved in each of the last 5 years. Debt-to-capital ratio for the combined 37 banks declined to 8.18:1 as of December 31, 1984, compared to 8.48 a year earlier and 10.57 at the end of 1980. Similarly, the debt-to-capital ratio of the combined PCAs declined from 4.49:1 at the end of 1983 to 4.41 as of December 31, 1984.

The capital structure of Farm Credit System institutions, as member-owned cooperatives, differs substantially for that of other commercial lenders. The issuance and retirement of capital stock and participation certificates fluctuate with loan volume and, typically, the purchase price of capital stock is added to the principal amount of the borrower's loan obligations when loans are made. The stock is retired when loans are repaid.

The 37 Farm Credit Banks Combined Balance Sheet
(In Thousands of Dollars)

December 31	1984				1983	1982
	Federal Land Banks	Federal Intermediate Credit Banks	Banks for Cooperatives	Combined	Combined	Combined
Assets						
Loans, less allowance for loan losses of $697,533; $665,437; and $635,092 in 1984, 1983, and 1982, respectively	$ 50,951,086	$ 17,245,028	$ 8,892,850	$ 77,088,964	$ 78,461,732	$ 77,875,809
Investment Securities	1,098,195	1,257,667	821,431	3,177,293	2,296,493	2,929,241
Interbank Notes Receivable	14,760	36,541	1,120	—	—	—
Total Earning Assets	52,064,041	18,539,236	9,715,401	80,266,257	80,758,225	80,805,050
Cash	146,054	70,394	22,024	238,472	216,720	185,712
Accrued Interest Receivable	2,689,216	572,840	218,167	3,480,223	3,501,521	3,743,898
Premises and Equipment, Less Accumulated Depreciation	108,628	58,379	37,985	204,992	161,996	157,681
Other Property Owned	313,794	3,475	3,869	321,138	122,525	35,154
Other Assets and Deferred Charges	126,520	116,870	77,066	320,456	288,650	213,240
Total Assets	55,448,253	19,361,194	10,074,512	84,831,538	85,049,637	85,158,735
Liabilities and Capital						
Consolidated Systemwide Bonds	41,876,261	15,064,985	5,130,110	62,071,356	62,850,432	63,175,224
Consolidated Bank and Other Bonds	4,015,182	926,067	289,846	5,231,095	5,181,986	7,972,308
Consolidated Systemwide Notes	1,117,806	660,852	3,111,393	4,890,051	4,783,155	1,856,433
Notes Payable to Farm Credit Associations, Commercial Banks, and Other Financial Institutions	675,239	51,844	16,640	743,723	617,005	547,399
Accrued Interest Payable on Bonds and Notes	1,612,048	606,888	190,884	2,409,820	2,295,130	2,668,880
Interbank Notes Payable	55	4,569	47,797	—	—	—
Other Liabilities	114,522	47,386	81,236	243,144	352,548	360,770
Total Liabilities	49,411,113	17,362,591	8,867,906	75,589,189	76,080,256	76,581,014
Capital Stock and Participation Certificates	2,854,139	1,425,411	861,279	5,140,829	5,058,040	4,979,367
Surplus	3,183,001	573,192	345,327	4,101,520	3,911,341	3,598,354
Total Capital	6,037,140	1,998,603	1,206,606	9,242,349	8,969,381	8,577,721
Total Liabilities and Capital	$ 55,448,253	$ 19,361,194	$ 10,074,512	$ 84,831,538	$ 85,049,637	$ 85,158,735

The Notes to the Combined Financial Statements included elsewhere herein are an integral part of the combined financial statement presented above and should be read in conjunction therewith. In the presentation of combined totals, interbank notes receivable and payable have been eliminated.

Five-Year Summary of Combined Selected Financial Data and Related Ratios
(In Thousands of Dollars)

For the Year Ended December 31	1984	1983	1982	1981	1980
Balance Sheet Date					
Loans	$77,786,497	$79,127,169	$78,510,901	$75,806,430	$66,248,780
Allowance for Loan Losses	697,533	665,437	635,092	573,237	482,175
Consolidated Systemwide Bonds	62,071,356	62,850,432	63,175,224	58,600,742	44,926,024
Consolidated Bank and Other Bonds	5,231,095	5,181,986	7,972,308	11,349,745	14,775,874
Consolidated Systemwide Notes	4,890,051	4,783,155	1,856,433	1,420,386	3,198,146
Total Capital	9,242,349	8,969,381	8,577,721	7,466,208	6,189,642
Income Statement Data					
Net Interest Income	930,358	903,592	1,190,732	1,023,787	946,879
Provision for Loan Losses	121,002	38,830	74,667	140,487	80,663
Net Income	441,552	542,773	993,908	867,589	739,460
Related Ratios					
Percent Increase(Decrease) in Loans (Gross)	(1.69)%	.78%	3.57%	14.43%	17.64%
Percent Increase (Decrease) in Net Income	(18.65)	(45.39)	14.56	17.33	59.82
Capital to Loans	11.88	11.34	10.93	9.85	9.34
Allowance for Loan Losses to Loans	.90	.84	.81	.76	.73
Net Chargeoffs to Average Loans	.16	.01	.02	.02	.00
Return on Average Assets	.52	.64	1.19	1.13	1.12
Return on Average Capital	4.83	6.19	12.39	12.71	13.15
Net Interest Income as a Percent of Average Earning Assets	1.15	1.12	1.49	1.39	1.50
Debt to Capital Ratio (:1)	8.18	8.48	8.93	10.06	10.57

The 37 Farm Credit Banks Combined Statement of Changes in Financial Position
(In Thousands of Dollars)

For the Year Ended December 31	1984	1983	1982
Financial Resources Were Provided by:			
Net Income	$ 441 552	$ 542,773	$ 993,908
Charges to Income Not Affecting Resources:			
Provision for Loan Losses	121,002	38,830	74,667
Depreciation and Amortization	8,671	21,535	31,929
Provision for Losses on Acquired Property	24,773	2,853	1,358
Total Provided by Operations	595,998	605,991	1,101,862
Consolidated Systemwide Bonds Issued	38,020,780	37,878,012	47,873,016
Consolidated Systemwide Notes Issued, Net	106,896	2,926,722	436,047
Other Bank Bonds Issued, Net	49,109	--	--
Decrease in Loans	1,251,766	--	--
Decrease in Accrued Interest Receivable	21,298	242,377	--
Decrease in Investment Securities	--	661,296	361,819
Capital Stock and Participation Certificates Issued	332,463	342,293	483,764
Decrease in Cash and Other Assets	--	--	39,876
Increase in Other Notes Payable and Other Liabilities	132,004	--	--
	$40,510,314	$42,656,691	$50,296,384
Financial Resources Were Used for:			
Increase in Loans	$ --	$ 624,753	2,717,283
Increase in Accrued Interest Receivable	--	--	301,589
Increase in Investment Securities	839,048	--	--
Increase in Other Property Owned	223,386	90,224	23,993
Consolidated Systemwide Bonds Retired	38,799,856	38,202,804	43,298,534
Consolidated Bank and Other Bonds Retired, Net	--	2,790,322	3,377,437
Capital Stock and Participation Certificates Retired	416,920	442,649	306,958
Decrease in Other Notes Payable and Other Liabilities	--	312,366	134,710
Addtitions to Premises and Equipments, Net	57,328	16,785	76,492
Increase in Cash and Other Assets	92,102	125,972	--
Dividends and Patronage Refunds Paid in Cash	81,674	50,816	59,388
	$40,510,314	$42,656,691	$50,296,384

The Notes to the Combined Financial Statements included elsewhere herein are an integral part of the combined financial statement presented above and should be read in conjunction therewith.

APPENDIX A

The Farm Credit System and the Farm Credit Administration

Farm Credit System institutions are private borrower-owned credit cooperatives that operate without any expenditure of taxpayer dollars. The System finances its loan operations through the sale of securities to investors in the Nation's financial markets. Included within the overall structure of the Farm Credit System are three bank groups:

1. Federal land banks (FLBs) and local Federal land bank associations (FLBAs) offering long-term loans secured by first liens on real estate.

2. Federal intermediate credit banks (FICBs) and local production credit associations (PCAs) providing short- and intermediate-term credit primarily for production purposes.

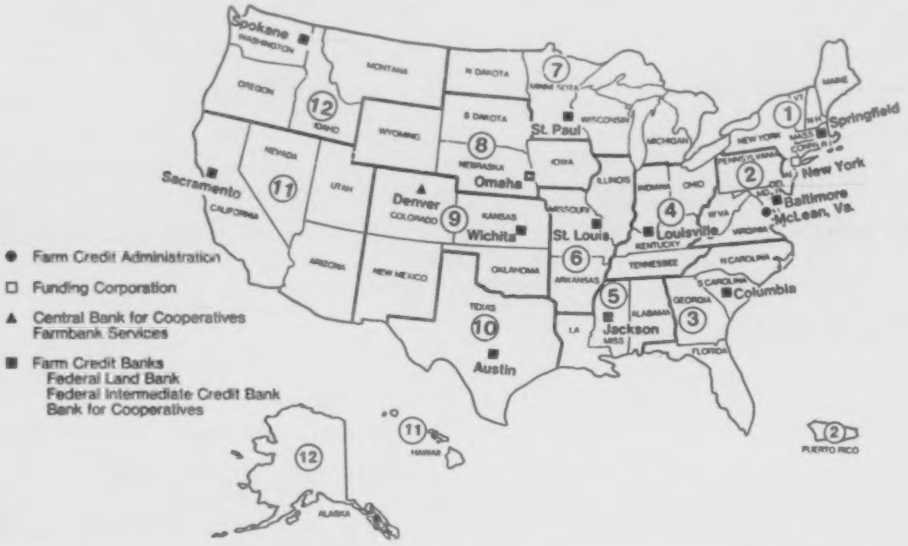
3. Banks for cooperatives (BCs) extending a full range of credit and related services to agricultural cooperatives.

The FLBAs and PCAs serve specific geographic areas in 12 districts with an FLB and FICB for each district. Each of the 12 districts also has a bank for cooperatives, and there is a Central Bank for Cooperatives located in Denver, Colorado. Directors of FLBAs and PCAs are elected by farmer-borrowers who are also stockholders in those associations. The district banks operate under the direction of a district Farm Credit Board of Directors, six members of which are elected by local associations and cooperatives. A seventh member is appointed by the Governor of the Farm Credit Administration (FCA).

Overseeing this organizational structure is the Farm Credit Administration, which consists of the Federal Farm Credit Board (FCA's policymaking body), the Governor, and his staff. Overall policy direction for FCA in its supervision of the System is set by the 13-member Federal Farm Credit Board. The Board is composed of one member from each of the 12 districts appointed by the President of the United States and confirmed by the Senate. A thirteenth member is appointed by and serves at the pleasure of the Secretary of Agriculture.

FCA does not rely on any federally appropriated funds for its operating expenses; rather, the expenses of FCA are borne solely by the System through assessments upon the 37 Farm Credit banks. FCA is fully committed to ensuring a healthy and sound Farm Credit System that is so essential for a productive agricultural sector; therefore, FCA closely supervises System activities to ensure that they meet specific objectives of the Farm Credit Act of 1971, as amended.

Cooperative Farm Credit System


● Farm Credit Administration
□ Funding Corporation
▲ Central Bank for Cooperatives Farmbank Services
■ Farm Credit Banks
Federal Land Bank
Federal Intermediate Credit Bank
Bank for Cooperatives
Spokane
WASHINGTON
OREGON
MONTANA
IDAHO
N DAKOTA
MINNESOTA
S DAKOTA
WISCONSIN
St. Paul
WYOMING
NEBRASKA
Omaha
IOWA
NEVADA
Sacramento
CALIFORNIA
UTAH
Denver
COLORADO
KANSAS
Wichita
MISSOURI
St. Louis
ILLINOIS
INDIANA
OHIO
Louisville
KENTUCKY
MICHIGAN
NEW YORK
PENNSYLVANIA
MAINE
VT
N.H.
MASS
CONN
R.I.
Springfield
New York
DEL
MD
Baltimore
McLean, Va.
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Columbia
TENNESSEE
ARIZONA
NEW MEXICO
OKLAHOMA
ARKANSAS
TEXAS
Austin
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APPENDIX B

Farm Credit Administration Budget

PURPOSE STATEMENT

The Farm Credit Administration is the independent Federal agency responsible for the regulation, supervision, and examination of the borrower-owned banks and associations that comprise the cooperative Farm Credit System.

Originally established as an independent agency by Executive Order No. 6084, effective May 27, 1933, the Farm Credit Administration was transferrred to the Department of Agriculture on July 1, 1939, where it remained until the Farm Credit Act of 1953 reestablished it as an independent agency under the direction of the Federal Farm Credit Board.

The Administration and the institutions under its supervision now operate under authorities contained in the Farm Credit Act of 1971, P.L. 92-181, effective December 10, 1971, as amended. The Act provides "for the farmer-owned cooperative system to make credit available to farmers and ranchers, for rural residences, and to cooperatives and other borrowers for farm-related businesses upon which farming operations are dependent, to provide for an adequate and flexible flow of money into rural areas, and to modernize and to consolidate existing farm credit law to meet current and rural credit needs."

On September 30, 1984, the Farm Credit Administration had 257 full-time permanent employees, 73 of whom were located in the field. These field employees are primarily bank and association examiner/supervisors and supporting clerical staff.

All expenses of the activities and personnel of the Farm Credit Administration are paid by assessments collected from the banks of the Farm Credit System.

ASSESSMENTS FOR OPERATING EXPENSES

Assessments based on estimated expenditures are collected from banks in the Farm Credit System and are available for administrative expenses. Obligations are incurred within fiscal-year budgets approved by the Federal Farm Credit Board as provided in Public Law 92-181.

BANKS FOR COOPERATIVES INVESTMENT FUND

This fund is available to the Governor of the Farm Credit Administration for investment in Class A capital stock of the banks for cooperatives.

The last of the Government's investment in the banks for cooperatives was retired on December 31, 1968, thus making them privately owned. The amount in the fund available to the Governor is $148,091,211. No investment of the Government capital in any of the banks is anticipated in the near future.

PASSENGER MOTOR VEHICLES

The 1986 budget estimates do not include funding for the purchase of any automobiles.

POSITION JUSTIFICATION

The Farm Credit Administration plans five new positions for fiscal year 1986.

Administrative Expenses
$ Thousands

Approved by the Federal Farm Credit Board and funded by assessments against earnings of the 37 Farm Credit Banks

Budget estimate, 1986	$ 21,175
Budget estimate, 1985	$ 20,182
Increase	

The increase of $993 for 1986 over 1985 is primarily attributable to the net effect of within grade salary changes, promotions, and changes in personnel benefits, and to increases in travel.

Program
$ Thousands

	1984 actual	1985 revised estimate	1986 estimate	Change 1985 to 1986
Supervision and examination of Farm Credit banks and associations	$ 20,274	$ 20,182	$ 21,175	$ 993
Unobligated balance	277			
Budget total	$ 20,551	$ 20,182	$ 21,175	$ 933

FARM CREDIT ADMINISTRATION EXPENSES

Year	FCA Expenses ($ Amount)	Percentage Increases in FCA Expenses	FCA Expenses as a Percent of Loans Outstanding	FCA Expenses as a Percent of Loans Made
1979	10,511,00	+19.5	.019	.020
1981	11,288,00	+ 7.0	.017	.017
1981	12,796,000	+13.4	.017	.017
1982	14,861,000	+16.1	.018	.022
1983	17,356,000	+16.8	.021	.027
1984	19,646,000	+13.2	.024	.029

AVAILABILITY OF FARM OPERATING LOAN FUNDS

Senator COCHRAN. I have a number of questions, but I am going to defer most of them and give other Senators an opportunity to question the witnesses. I do want to nail down, though, so there won't be any question about it, the intent of the Department with respect to the Insured Operating Loan Program of the Farmers Home Administration.

Senator Andrews, when he was here, raised the question that we had been discussing privately, but I want to make sure we understand each other.

Am I correct in restating the position of the Department that the terms of S. Res. 79, which was passed by the Senate, will be carried out by the Department, specifically by making available to eligible and qualified borrowers, insured farm operating loans to meet operating credit demands for the 1985 crop?

Mr. NAYLOR. Yes, Senator. That's correct, both with regard to operating loans under our direct program and under the guaranteed program.

Senator COCHRAN. To do this, I understand that you are having to make transfers of funds from some accounts under the jurisdiction of the Department of Agriculture to the insured operating loan account of the Farmers Home Administration. Is that correct?

Mr. NAYLOR. We have not had to do that up until this week. We are making such a transfer today.

Senator COCHRAN. Am I to understand also that the amount of money being transferred into this account is $300 million?

Mr. NAYLOR. The initial transfer will be that. However, we will continue to transfer as required to meet demand as we proceed into the balance of the lending season.

Senator COCHRAN. I further understand that there is no need, under current law, for this committee, at this time, to report out a supplemental appropriation bill providing additional funding for the Insured Loan Program of the Farmers Home Administration. Is that correct?

Mr. NAYLOR. Mr. Chairman, it is our view that is correct.

Senator COCHRAN. There is authority under the law, I know, to make these transfers under appropriate circumstances, where you run out of money and there is an emergency or an extraordinary set of facts. You have the authority under the law, do you not, to make these transfers? This is not something that has never been done before, is it?

Mr. NAYLOR. No, sir. This is not the first time that we have used this transfer authority to make sure that credit was available on a timely basis.

Senator COCHRAN. Will the transfers that are being made from other accounts put those other accounts in such shape that you will probably, at some point, request a supplemental appropriation to put that funding back where it would have been before those transfers had been made?

Mr. NAYLOR. Mr. Chairman, after discussions within the Administration today, the fund from which the transfer will be made will not need to be replenished. It will not affect any of the other programs.

Senator COCHRAN. Is this going to be the emergency disaster fund that is in the appropriation bill passed by this committee?

Mr. NAYLOR. Yes, Mr. Chairman, it is.

Senator COCHRAN. That fund is not limited by amount. It is described as, "Such funds as may be necessary." Is that correct?

Mr. NAYLOR. That's correct.

Senator COCHRAN. And that is why you might not have to come back and ask for a supplemental.

Mr. NAYLOR. That's correct, Mr. Chairman.

Senator COCHRAN. Now, this isn't going to get the farmers in such a shape that if there is a natural disaster that we will run into OMB's saying, "Oh, no. You have already taken that $300 million or more out of that account. We can't afford to do anything now.

We are not going to run into anything like that, are we?

Mr. NAYLOR. No, Mr. Chairman. The demand on the Emergency Lending Program has been rather light this year. We have already designated the counties that are up for loans this spring. New designations, if they occur, will be as a result of conditions that develop in the current season.

Senator COCHRAN. Speaking for this individual Senator, not as trying to speak for the committee or any other Senators, I am committed to ensuring that whatever funds are necessary are made available to carry out the terms of S. Res. 79.

I want to be absolutely certain that before we run out of money to carry out any of the programs described in S. Res. 79, that we be notified in a timely fashion by the Department, so that if a supplemental appropriation is needed, we can get it, report it out of this committee, and have it passed by the Congress. Do you have the assurance of the Secretary that that kind of notification will be given to this committee?

Mr. NAYLOR. Mr. Chairman, I do.

Senator COCHRAN. I thank you. Senator Bumpers.

Senator BUMPERS. Mr. Naylor, just in a general way, in going over your and Mr. Calhoun's statement——

Senator COCHRAN. Senator Bumpers, I made an error. Senator Stennis was here first.

Senator BUMPERS. He certainly was. I am sorry.

Senator COCHRAN. The Chair recognizes Senator Stennis.

Senator Stennis. Senator Bumpers said he has another meeting. I will be glad to let him go first.

AVAILABILITY OF CREDIT TO FARMERS

Senator BUMPERS. Mr. Chairman, I would really appreciate that. I only have about 2 or 3 minutes' worth here. But I just want to say that when I look over the total agriculture bill that has been submitted by the Administration to phase out price supports, which has been the only way that farmers have been able to survive in recent years, and then when I look at the statements made here this morning, it appears that the Farmers Home Administration is obviously getting to the point where there will be no credit available, except through traditional financial institutions.

It seems to me that the net result of all this is a continuing disaster for farmers. I am not sure that under the proposals that are made here this morning by the Farmers Home Administration there is any point even maintaining, even continuing the Farmers Home Administration.

GUARANTEED LOAN PROGRAM

You go into a guaranteed loan program. In Arkansas, 40 percent of all farmers there have some kind of a loan with the Farmers Home Administration. In my State, 25 percent of them get annual financing there, and nationally, 10 to 12 percent of the farmers borrow annually from the Farmers Home Administration.

You used the word "redirection" in the testimony here. As far as disaster loans are concerned, you are depending on Federal Crop Insurance to take care of all problems. We had a total of 142 disaster loans made in Arkansas in 1984. Because of the stringent 30-percent rule, nobody qualifies for it. And crop insurance is very unpopular in my State because it doesn't cover very much and the rates keep going up.

So it just seems to me—let me make one other point here. In Arkansas, we have had 4,482 farmers request a set-aside. That is the debt set-aside, and to date, 93 have qualified. Now that has been much ballyhooed, the Debt Set-Aside Program, to set aside up to 25 percent of a farmer's debt, put it at the tail end of his loan, and so on. That sounds good on the front end, but you think about that. In my State, 4,482 farmers have requested that, and as of this moment, 93 have qualified, 1,315 have been rejected, 560 have had their loans rescheduled or reamortized, and the rest are still pending.

The paperwork, they tell me, is staggering. Do you have any comment on that, Mr. Naylor?

Mr. NAYLOR. I would like to make several observations on that, Senator. First of all, the terribly heavy volume of such servicing requests results from the fact that we contacted our borrowers and asked them if they thought they might want to use the special servicing options. Many of them responded whether they had a real need for such servicing or not. About half of those contacted actually did ask to be reviewed. Many of them, however, were not eligible for the type of rescheduling involved.

DEBT ADJUSTMENT PROGRAM

We have already made this year, 25,000 reschedulings or debt adjustment actions to help producers nationwide. It is a complicated process. We do that because it involves restructuring multiple loans in many instances, but despite that, we have been very aggressive and have processed a large number of the cases which were eligible and could be helped. We will continue to do so in your State. We will meet the need in a timely fashion for this current crop season that is about upon us.

We have seen a good deal of criticism, Senator, from both directions. There are many producers and farm leaders who feel that we have been too liberal and that we have gone too far. In fact, I just left a meeting with Congressman Stenholm and Congressman Boulter from Texas, in which we had about an equal division of those who thought we had gone too far and those who didn't think we had gone far enough in the programs that we are administering under Farmers Home Administration this year. Perhaps that indicates we are reasonably close to the mark. It is a narrow line that we walk between helping farmers in a productive way in providing them with the operating credit they need and doing it so they have a chance to make it through this difficult period, or simply making conditions far worse for some of them.

It is not an easy job. It is a substantial workload that we have put on our local offices. The stress of those decisions, and the pressure of their being local citizens and understanding the farmer's problems, has made this a particularly difficult year for our employees.

I think they have made a conscientious effort, and despite the heavy workload, we will have timely decisions made for credit this year.

FUNDING REDIRECTION

Senator BUMPERS. It is my understanding from everything that has been said before this morning and this morning, that the Farmers Home Administration wants to move totally out of the direct loan business and into the guaranteed loan program business?

Mr. NAYLOR. That is correct for the future. There will be a 5-year period of transition to accomplish that. The environment as it exists today is totally different from just 2 or 3 years ago. The commercial banking industry and the cooperative Farm Credit System are in a better position to meet credit needs and provide the service to the farming community than under our current approach.

Senator BUMPERS. You know in my State, Mr. Naylor, farmers only go to the Farmers Home Administration after they have been turned down by the banks. I mean when you consider the number of loans that you have, what you are saying is, "Go back to where you have just been rejected."

What kind of hope does that give to the American farmers who have been relying on the Farmers Home Administration really as the bank of last resort? They are not there because they want to be. They are there because they are up against——

TRANSITION TO GUARANTEED PROGRAM

Mr. NAYLOR. Senator, the guaranteed program provides the commercial banking system and the cooperative Farm Credit System the option to be able to stay with producers they would not have otherwise been able to stay with. We feel that they will be able to make credit judgments more equitably and fairly. They will be able to do so on a timely basis and also provide adequate servicing.

This can't be done overnight, nor should it be done overnight. It will take several years to complete. It has to be done with a good deal of thought and care to be sure that we look out and properly protect the interest of our borrowers, and we intend to do so.

Senator BUMPERS. Well, I can tell you, Mr. Naylor, that in my State, the banks are not going to make these loans.

They are not going to get back—they have been getting out of the agricultural loan business because of the bad performance, because of the risk involved, because of all the things there is no point in belaboring here again, and you are telling these people to go back to where I can tell you with an absolute degree of certainty that they are not going to be eligible for credit.

So what you are saying to all these Farmers Home Administration borrowers is, "You move into the Guaranteed Loan Program."

First of all, under your proposals, you are saying that they must liquidate the loan before they come back to the Farmers Home Administration for whatever guarantee there is. The banks don't like that either.

Under the Small Business Administration, when there is default, the Government picks up the tab and they start handling the loan on their own. Under your regulations, you are saying that if the banks make the loan, they have got to liquidate it before they can even come to you for the guarantee. Now banks are not going to do that, Mr. Naylor, and I think you know that, don't you?

Mr. NAYLOR. No, sir, I don't know that. I would be surprised if the Members of Congress would not want to have the banking industry be accountable for its performance and its operation of this loan and in meeting its community responsibility in providing credit for all the people within its service area.

Senator BUMPERS. You know if Farmers Home is going to have to tighten up, that is one thing. You know, I think this is a critical time to be doing that.

But to me, that is infinitely better than going through these games of saying we are redirecting our efforts toward the Guaranteed Loan Program, which is tantamount to saying that the farmers are not going to have the Farmers Home Administration to make loans anymore.

You are saying we are going to send them back to the banks and move toward this free market business. As I say, that is tantamount to telling them goodbye.

RURAL WATER AND WASTE TREATMENT PROGRAM

Let me just ask a couple of other quick questions, Mr. Chairman, and I will get going. You know I have always believed strongly in the Rural Water and the Rural Waste Treatment Program in the Farmers Home Administration, and you have touched on that, either you or Mr. Calhoun, one, in your statement.

You have gone from $340 million this year to $50 million next year, which, again, is tantamount to saying that there will be no more rural water and waste treatment facilities loans or grants in this country.

That has been an absolute godsend to my State. We have wonderful rural water projects all over that State, and I can tell you there will not be another one if you get your way with this program.

I want to thank you, incidentally, for going back and reassessing a situation in my State, in Green Forest, where the underground water supply in the rural area was polluted, and the people there didn't qualify because their income limit was too high. You went back and redid it and decided that they did qualify.

I know that Senator Stennis and Senator Cochran have a similar situation in Mississippi, and they are cosponsors of a bill that I introduced that took care of that. Even though my situation is temporarily taken care of, I am going to continue to push for it for them and other areas across the Nation.

But what is going to happen to the rural areas of this country as their underground water supplies are polluted, and you are saying there won't be any more funds for this kind of thing? What is going to happen to them?

Mr. NAYLOR. Senator, we have looked at this very carefully. I would be happy to discuss it with you and other Members in some great detail. In a short answer to your question, with very few exceptions, rural communities today, with or without bond ratings, are fully capable of going into the marketplace under a regional security basis and raising appropriate funds for this type of project.

Only in a few cases where very poor communities exist and health hazards of significance are involved is there a very clear-cut role for the Government to continue to be involved. The funding that we have proposed is intended to be targeted for, on a very narrow basis, those needs that must and should be met by the Government.

There are more than adequate funds available in the commercial sector today at reasonable rates. Funds are available to even unrated communities for these purposes and they regularly raise funds for these and other purposes.

I would be happy to discuss with you or other Members as to the thinking and review that went into making this decision. It will not deter the ability of communities to be able to obtain water and sewer resources with credit from the private sector financing community.

LAND SALE MORATORIUM

Senator BUMPERS. Mr. Naylor, let me again make a plea to you and Mr. Calhoun. You have two counties in my State that are on the moratorium list. We have got over 20,000 acres of land in Farmers Home Administration inventory, 115 farms. It is estimated that by the end of this year, we will have 150 farms in inventory.

I want to plead with you again, to declare Arkansas, the total State, to put a moratorium on the sale of inventoried lands, because the land values in my State are depressed, just like they are everywhere else. If that land is put up for sale, it is going to have a depressing impact on land value.

So I am hoping—you have about nine States that you have already declared a moratorium in. Is that right? Yes. Clay and Madison Counties in my State, and then nine other States. Is there any particular reason not to declare the entire State of Arkansas?

Mr. NAYLOR. We have generally left it within the discretion of our State Directors to make a determination as to whether or not normal sales conditions exist within a county. If not, they are to withhold from sale any property that is within that area. In those areas where it has been clear that there has been a State-wide situation, or where the market has reached such a level that the situation may be permanent, we have made a State-wide assessment and pulled back from real estate sales. I will be happy to take a look at your State, Senator.

Senator BUMPERS. Will you tell me that if I can talk to Bob Hankins, it is OK with you?

Mr. NAYLOR. He can do that today, Senator.

Senator BUMPERS. Well, I promise you that I am going to give him a chance to, before the sun sets.

Mr. NAYLOR. Well, we would be delighted to work with you on that. It is clearly our intent to withhold property from the marketplace anywhere it might be disruptive or would otherwise adversely affect local economic conditions, and we will do that.

Senator COCHRAN. Senator Stennis.

Senator BUMPERS. Mr. Chairman, thank you very much. Senator Stennis, thank you for yielding to me.

Senator STENNIS. That's all right.

Senator COCHRAN. Senator Stennis.

Senator STENNIS. Mr. Chairman, members of the committee, and gentlemen, many of these questions by Senator Cochran apply to my concerns. We have the privilege of representing the same State. I will not go over some of the ones that he has asked.

I have been close to the Farmers Home Administration for many years. You have done a world of fine work in my State. At one time we had one of the best records of any State. I am not trying to discredit the Agency; rather, I am grateful to it.

But, we are in a bad fix now, as you know. You are saying you were trying to find a way out, to abandon the loans here, that you are going to get out of the insured loans. Now, that covers about 65 percent, at least, of the present loans or borrowers in our State. So if you are trying to get out of that, you are, in effect, leaving us. Without question or blame, I think it reflects the situation that you are in, in many respects.

Now, what are we going to do about this? I am concerned about the finances along with most everyone else, the national finances. This is right down to home base, right down to across-the-road neighbors. We have some land in Mississippi that is about as rich as you find in the Nation, but the land is certainly far from being all of farming. These are human beings—people that you are dealing with.

Now, I know enough about farming—crop planning, planting, and everything is about over. Something has to be done this year, and you need not expect to save any money out of it. Something has to be done to keep the wheels turning.

FUNDING TRANSFERS

I want to refer to your allocations for fiscal year 1985. In Mississippi, $97 million is allocated for farm production loans—which, by the way, is almost $100 million less than was obligated last year.

Now in the past 2 years, this amount was made up by borrowing from other Farmers Home Administration accounts, although as we understood it then, you were not going to have to do this. Now where do you plan this year to get the authorization?

Mr. NAYLOR. Senator——

Senator STENNIS. What other accounts are you going to borrow from?

Mr. NAYLOR. The transfer which will be made today will come out of the emergency disaster funds.

Senator STENNIS. That will be your additional source?

Mr. NAYLOR. Yes, sir. We are not disrupting any other program.

Senator STENNIS. I believe Chairman Cochran has covered the situation here, or someone did. When you are faced with a situation like that, people will tell you that that remedy is not open to you.

Now, we are called upon, almost daily, to appropriate sums of money to help other people throughout the world. I am not a traveling person, but I believe I support those requests anyway.

Now, this matter here is crucial—we have let an emergency happen. It seems that maybe you could have used your time better in getting to this thing faster, and could have made it come to a head sooner.

Now, what are we going to do? Do you have enough field men to get out and cover the situation? These banks, they are not going to loan—not this season—they are not going to loan money without guarantees, without you behind it.

ADDITIONAL STAFFING

Do you need more field men? I call them "field men," the ones who go out and look at the individual farm and so forth. If you do, I think you ought to ask for them.

Mr. NAYLOR. Senator, we have about 1,300 additional personnel of our own plus a substantial number who have been provided by various State governments and individual entities who are helping us during this peak lending season. I think you understand better than anyone that with this very compressed lending season that we have for spring plantings, we are always under pressure to get those funds out, and probably will never have the staff that you would put in place to handle 2 or 3 months of peak activity.

We do have, because of the heavy workload this year, significant additional resources that have been put in place to help us with loan processing. There have been 42 additional temporary personnel allocated to Mississippi. Most of the activity has been in the Grain Belt this year. Mississippi, however, has always had a substantial increase in allocation of resources to supplement the basic permanent personnel that are in place within that State.

Senator STENNIS. Well, I know you have the Grain Belt problem. I don't want to try to draw people away from that, but do you have plenty of personnel? I am not trying to give anyone a job. Do you have plenty of personnel in Mississippi who can handle this problem on a emergency basis?

Mr. NAYLOR. Yes, sir; I think we can manage it on a timely basis and will continue to work with the commercial lenders. In that area, the cooperative Farm Credit System is the other major lender that is located out of Jackson, MS. We will continue to work very closely with them through the guaranteed programs also.

APPROVED LENDER PROGRAM

Senator STENNIS. Well, I have heard talk about loosening the requirements more for the guaranteed loan. What is the status now? Are you going to loosen it up any more, between now and the end of the season down in our area?

Mr. NAYLOR. We have taken several actions to make it easier for the banks and the cooperative Farm Credit System to use our Approved Lender Program, which shortens the processing time considerably. This includes the blanket approval of the Farm Credit System lending associations to be approved lenders rather than have them come in on an individual basis. I think that will help speed things up.

Senator STENNIS. Well, I believe as far as the banks coming now into the programs this year, it is down to a very small percent, almost a pittance—I believe either 6 percent or 8 percent. They are just not participating.

I don't think there is anything much you can do about it now for the planting season unless you really put on an emergency drive. You first have to make up your mind to do that. Of course, you have to have money to do it. So the bankers are the only ones you have. Maybe we can supply some extra money.

I feel that I know what I am talking about. Stress is building. Injury is going to come to the people, to the farmers themselves. At home, as long as people are really suffering this way, why, the call for help has to be answered.

I appreciate what you are doing on a personal basis. I think we are failing as a whole.

Thank you, Mr. Chairman.

Senator COCHRAN. Thank you, Senator.

Senator Kasten.

DEBT ADJUSTMENT PROGRAM

Senator KASTEN. Mr. Chairman, thank you very much. I want to talk specifically about the Debt Adjustment Program that has now been in effect, what, Mr. Naylor, about 5 or 6 weeks?

I guess I would echo what the Senator from Mississippi just said. I don't think any of us have any criticism of you or anybody at the table personally, but I don't know that anyone is taking this situation as seriously as it needs to be taken. We have got problems. You can't just sit back at a table and say they are going to go away.

Now, I checked on Friday with my Farmers Home people. My understanding is that roughly 60 farmers nationwide have received assistance under the Debt Adjustment Plan that the Administration put forward. And we have two farmers who have made it through the hoops in Wisconsin. In 5 weeks, two farmers.

Farmers Home in Wisconsin has set up additional offices to process direct loans, and has reserved one office in Wisconsin Rapids to process applications under the Debt Adjustment Program. Wisconsin Farmers Home has also been able to hire additional personnel on a temporary basis. But response to the DAP has still been minimal.

It seems to me that we have got to start to address this problem. It might be too late, as the Senator from Mississippi just suggested, for further debt assistance measures to help farmers in time for spring planting.

But the failure of a program that relies heavily on loan guarantees has important implications for the Administration's farm credit budget proposals for next year, the proposals that we are talking about right now.

What can USDA do to modify the DAP so that more farmers are helped? What does the failure of the program say about the proposal that the Administration is suggesting that, in fact, is less than what is failing right now? Rather than doing more, you are proposing doing less.

I don't object, necessarily, to all the directions that the Administration is talking about going in, but what you are talking about is a drastic change, a reduction, in a program that right now isn't providing enough. It is not going to work.

So I want to just suggest to you that we have also got problems, as the Senator from Mississippi and the Senator from Arkansas said, with what is happening with the banks and the production credit associations. There are a lot of farmers who Farmers Home can be of some help to and they will still be able to have the help if the 75-percent guaranteed loans are attractive enough to commercial lenders. But right now we are at 90 percent and that is not attractive enough.

In Wisconsin right now, I have been told that banks, PCA's, and other lenders have told troubled borrowers to go to the FmHA rather than to try to help them through with the Debt Adjustment Program as is presently structured.

FmHA in Wisconsin is now burdened with a backlog, as of Friday, March 11, of over 5,000 applications. We are talking about somewhere in the neighborhood of 6 or 7 weeks before direct loans can be serviced. Now some lenders are complaining that the guarantee offered, the 90-percent guarantee offered, is hard to collect on, and they are not willing to work with their borrowers anymore. They are simply going to push everybody over into FmHA where you have that backlog.

No. 1, is it your understanding that, in fact, only two loans have been restructured in Wisconsin and about 60 nationwide under DAP?

No. 2, if the banks aren't willing to take on these loans now, why do you think they are going to be willing to take them on at 75 percent rather than 90?

Mr. NAYLOR. Senator, you have asked a series of complex questions. I will do my best to try to answer them for you. First of all, there is clear evidence that through the second week of February, while we were making record numbers of operating loans, roughly 40 percent of our loans were being made under the category of first time borrowers. That is an unusually high figure. I think that the evidence indicates that many banks, rather than staying with agricultural lending, are trying to seek a new home for some of those borrowers who they normally can and should be servicing. We have taken on that responsibility in order to provide the needed operating credit on a timely basis.

COMMERCIAL BANK USE OF GUARANTEE PROGRAM

It is also equally clear, Senator, that the commercial banking leadership was waiting to see what additional adjustments the Congress might make and the administration might accept before they made a final decision on whether or not they would indeed use the Debt Assistance Program.

The Iowa Bankers Association, in response to our criticism for the lack of timely action on a basis consistent with nationwide commercial banks, said that they were taking an unfair rap. They said that they indeed intended to use the program, but that they were in the process of preparing a number of applications which they would be submitting in a timely fashion before the end of the current lending season. Our State Directors report that that type of upturn appears to be taking place. We cannot force a commercial bank or cooperative Farm Credit System lender to use our guarantees.

Senator KASTEN. No; but you can have a program that is attractive enough for him so that the system works. We have got this huge amount of money out here that you have allocated, you have told us, as much money as will be needed. But you are still playing with that $650 million figure that you had last September and you probably haven't used but $50 or $100 million of that.

Mr. NAYLOR. About $150 million.

Senator KASTEN. The reason that it isn't being used is because the program isn't attractive enough to lenders, and therefore doesn't work.

Mr. NAYLOR. Senator, I absolutely disagree with you on that. The program is in two parts. There is a regular guarantee program, which provides a 90-percent guarantee to a bank which is as attractive as any guarantee could possibly be. It is a very lucrative arrangement for the bank. Any bank that can't do well on one of those guarantees shouldn't be banking.

Senator KASTEN. Are they using it?

Mr. NAYLOR. Yes; they are. But, not in the numbers that we expected. The Debt Adjustment Program involves their marginal and substandard loans, which are already in deep trouble as a result of lending decisions they made. Without some restructuring of those loans, they are not viable loans. What we have said to those banks is, if you will make concessions to make them viable loans, we will come in and give you Federal guarantees to do that. That is a responsible course of action. The Congress and the General Accounting Office would be seriously critical of us if we made any loans on a less responsible basis.

Both of those programs are good programs. There is no reason why the banks of this country should not be using them. We intend to continue to work with them and, where necessary, put pressure on them. I would suggest that we would certainly expect your help in that regard for the banks to meet their community responsibility to stay with their borrowers and not move out of agricultural credit. That is the responsibility that the commercial banks have. It is a responsibility that we expect to see them keep and we don't want to do anything that would detract from their accepting that responsibility.

Senator KASTEN. Mr. Chairman, I have one more question, and I have some other questions I would like to submit for the record. If they are now walking away from the program at a 90-percent guarantee, what makes you think that they are going to embrace a program at a 75-percent guarantee?

Mr. NAYLOR. Senator, I think you are going to see that once the banks become familiar with the Approved Lender Program and begin to use it—as they are beginning to do based on the substantial increase in requests for that program within the last 10 days—and once they see that this is the program that the Congress and the Administration are going to make available on an ongoing basis, they indeed will use it. We will see increasing use in the years ahead. I think you will see substantial use of the regular guaranteed loans next year, if we proceed forward with this budget proposal.

Senator KASTEN. We are going to be monitoring this both for Wisconsin and for the country on a week-by-week basis. It seems to me that 5 weeks and two debt restructuring efforts is not adequate. I don't know how you can say that it is. We are going to be working with this and monitoring it.

It seems to me that you are going to have to become much more concerned about that medium-sized family farm, the kind that I represent in Wisconsin. I don't know what is going on in some of these larger farms in other parts of the country. But I do know that we have a situation in Wisconsin that is intolerable and must be changed, and we are going to work to change it.

Mr. Chairman, I have some questions that I would like to submit for the record. I thank you very much.

Senator COCHRAN. They will be submitted. I appreciate your contributions to the hearing.

Senator McClure.

[CLERK'S NOTE.—All questions and answers submitted in writing appear at the conclusion of today's testimony.]

BANKING POLICY ON MARGINAL LOANS

Senator McCLURE. Thank you, Mr. Chairman. I want to follow through for just a moment. I expect that what we see are banks indeed holding back, seeing whether there will be a better deal made; and second, I also have the strong suspicion that any well-managed bank is going to do its best to move marginal loans over to a Federal program, aren't they?

Mr. NAYLOR. Yes, Senator, I think there is every indication that many are attempting to do that, even in cases where they should be staying with their borrowers.

Senator McCLURE. In the end, if we are very careful—even if we aren't very careful—the commercial lenders of the country will have succeeded in shifting all their marginal or losing loans over to the Federal responsibility, and the Federal Government and Federal taxpayers bear all the loss.

Mr. NAYLOR. I hope that is not the case. I think that would be a tragedy for American agriculture not to have the private sector, both the commercial banks, and more importantly, the cooperative Farm Credit System, remain the major source of credit for American agriculture.

Senator McCLURE. Mr. Naylor, I agree with that assessment. I think it will be a tragedy if indeed it occurs, but I expect that a bank manager looking at his board of directors and the investors who own the bank are going to do their best to minimize their losses, and if you will take their losses off their shoulders, they are going to be more than willing to allow you to do that.

Mr. NAYLOR. Yes, Senator, I think that is true. That is one of the reasons that we are going to increase our efforts to persuade the banks to properly evaluate the use of the loan guarantees as an alternative to leaving a customer that they should be staying with. The banks, historically, have not done their homework on this—particularly the small country commercial unit banks. A bank that will examine that program and make the least bit of effort on it at all will find that the regular Guarantee Program is a particularly attractive program and the Debt Assistance Program is an effective program in coping with the marginal loans, for which their losses would be substantially heavier if they took the alternative course of action, which would be liquidation.

Senator McCLURE. I may agree with you on that. In fact I do agree that the program is a very good one, if it is utilized, and if it can be made to work to get those loans out so that they do have the operating capital.

I am concerned, as are the Senators from Mississippi in particular, that their spring planting time has gone by, and ours is getting to that point, in spite of the fact that I was in a snowstorm in Idaho over the weekend. It is getting close to the time we are going to be planting.

If we don't have the operating loans, we have lost a year. We haven't lost a week or a month, we have lost a year. So time is of the essence.

But I am very concerned indeed of this debt transfer on the shoulders of the taxpayers of the country. I think it is happening. I think it will continue to happen and the truth of the matter, as I view it, it is going to be very difficult indeed to blame the banker for it. The Federal Government gets blamed for it, regardless of what the truth is, regardless of what the equity is.

I expect that the local banker has more credibility than Uncle Sam.

Mr. Naylor. I expect there is some of that, although there is some evidence that we have worked with the farm groups and the banking groups around the country. The local banks are feeling the pressure to remain responsible to the needs of their community, and their future is dependent upon their willingness to stay with their trade area and most particularly with the farmers. On an overall basis, there is simply no justification for not doing so.

TRANSFER OF MARGINAL DEBT

Senator McClure. I assume you have had communication with your State directors with respect to how to avoid the unnecessary transfer of marginal debt from the private sector to the Government program, have you not?

Mr. Naylor. Yes, Senator, we have, although it is extremely difficult under present law to enforce. It is frustrating to us that the banks can, in some cases, make a statement that they cannot grant credit, when in fact, they could do so with a guarantee. They send that customer to us to ask for a direct loan.

Senator McClure. You are caught in a dilemma that I have already heard reported, that borrowers who went from their banker, who told them to go to see you, and then the State director sent them back to the bank.

The farmer is a pawn in that game. He is helpless because the bank won't do it and you won't do it, and he is left caught in the middle. He is angry with you both.

Mr. Naylor. Yes; I find that a very unsatisfactory way of doing business. Our personnel have been directed not to do that to a producer. They are to deal directly with the bank. They are to insist that the bank demonstrates that they do not have the capacity to handle the loan under a guaranteed status for the balance of this lending season and for the future. We are hopeful that that will make it clear to the banks that we also hold them accountable to do everything possible to meet the operating credit needs out there. Certainly our own direct activity indicates your concern is justified. We are already at an all time record level of direct lending activity in our operating loans, both in numbers and in amount. We will have quite a few more loans before we complete the season. I think that this trend is not a good one.

Senator McClure. Mr. Chairman, have you requested of them the instructions which they have provided to State offices with respect to this problem?

Senator COCHRAN. No; we haven't specifically made that request.

Senator MCCLURE. I wonder if we could ask if you would supply to this committee the written instructions which have gone to the State directors in this regard?

Mr. NAYLOR. We would be delighted to do so, Senator.

[The information follows:]

INSTRUCTIONS TO FMHA STATE DIRECTORS

FMHA AN NO. 1168 (1980)

SUBJECT: Obligation of Loans Under the Guaranteed Debt Adjustment Program (DAP)

March 27, 1985

TO: All State Directors, FmHA

Purpose/Intended Outcome:

FmHA field offices can process obligations for farm ownership DAP loans (type of assistance 33) and farm operating DAP loans (type of assistance 49) through the State Office terminal system. Special mailing procedures established in an October 26, 1984, memorandum (subject as above) are rescinded.

Implementation Responsibilities:

In accordance with FmHA AN No. 1133 (1940), dated January 17, 1985, I urge each of you to take the necessary action to immediately begin processing these DAP loans through your terminal system.

Dwight O. Calhoun

DWIGHT O. CALHOUN
Acting Associate Administrator

EXPIRATION DATE: December 31, 1985

FILING INSTRUCTIONS: Preceding FmHA Instruction 1980-B

FMHA AN NO. 1162 (1951)

SUBJECT: Farm Credit Initiative Reporting

March 21, 1985

TO: All FmHA State Directors

In November 1984, the Farm Credit Initiative Report was established by AN No. 1108(1951) to collect timely and accurate information on the President's Four Point Program. This reporting requirement was slightly modified and moved from a monthly to a weekly frequency, effective February 1, 1985, per AN No. 1134(1951) dated January 17, 1985.

Currently, the National Office is using three reporting mechanisms for the assimilation of information: 1) weekly telephone information required by the Legislative Affairs and Public Information Staff on Wednesdays; 2) weekly telephone information obtained on Thursdays accumulated by the Planning and Analysis Staff, including the information which was originally requested in Frank W. Naylor, Jr.'s letter of February 5, 1985; and 3) the Farm Credit Initiative Report itself, which is being sent by the County Office directly to the National Office.

In an effort to save time in the County Offices and to improve on the timing and quality of the reports, we are combining the information obtained from the above mentioned reports into one report. The previously mentioned three reports will be discontinued as of March 31, 1985.

This Administrative Notice is being sent directly to State Directors, who will have the responsibility to retransmit this AN to each of their County Offices. This procedure is necessary to ensure that actual reporting under the new format can commence on March 31, 1985.

State Directors will be held accountable for timely conveyance of accurate data which will be submitted in the following manner:

1. County Offices will accumulate pertinent data as required on the attached two-page form (Attachment 1), and mail this form to their appropriate State Office on the day following the report cut-off date. These completed forms are no longer to be mailed to the National Office.

2. State Offices will then enter the data submitted from each County Office into the Farm Credit Initiative Reporting System operated at the Kansas City Computer Center (KCCC). This must be completed no later than the close of business of the fourth business day following the cut-off date using the attached procedure (Attachment 2).

In order to ensure a complete and accurate data base it will be necessary for all County Offices to compile the appropriate data contained on Attachment 1, for the period of October 1, 1984 through March 31, 1985. Thereafter, the data will be collected non-cumulatively for the periods of April 8th, 15th, 22nd, and 30th. After April 30th, the reports will be submitted as of month-end, also on a non-cumulative basis. There are two exceptions on the March 31, 1985, report as follows: 1) Item A.1 should only report on County Committee meetings held during the period, March 23 through March 31; 2) questions 60 through 71 are to be reported on guaranteed applications on hand without a County Committee decision on a non-cumulative basis as of March 31.

A new computer system for the Farm Credit Initiative Reporting System (FCIRS) is being developed. It operates in the same manner as the Rural Community Facilities Tracking System (RCFTS). Those individuals trained in the use of RCFTS, should have no difficulty reading and understanding the procedures presented in Attachment 2, and then using the FCIRS. Report output will be available through the system to State Directors for their States.

This new system should be less time consuming than the preparation of the three separate reports currently being prepared and will provide valuable management information to the State Director, the National Office, and the Secretary of Agriculture.

State Directors will be held accountable for complete and accurate reports being submitted within 4 working days from every County in their jurisdiction.

Dwight O. Calhoun
DWIGHT O. CALHOUN
Acting Associate Administrator

Attachments

EXPIRATION DATE: September 30, 1985

FILING INSTRUCTIONS: Preceding
FmHA Instruction 1951-A

ATTACHMENT I

Page 1

(Codes)

-- -- --
State Dist. County

Reporting Period: Month Day
beginning -- --
ending -- --

FARM CREDIT INITIATIVE REPORT

Activity During the Reporting Period

A. 1. Number of County Committee meetings held during the reporting period.................... ____

B. DEBT SET ASIDES

2. Number of borrowers requesting set asides... ____

3. Number of borrowers Rejected for Set-Aside because a positive cashflow was projected without servicing action(s)... ____

NUMBER OF BORROWERS REJECTED FOR A SET-ASIDE BECAUSE A POSITIVE CASHFLOW COULD BE ACHIEVED BY:

4. Rescheduling/reamortization at regular interest rate.................................. ____
5. Rescheduling/reamortization at Limited Resource rate.................................. ____
6. Debt adjustment by other lenders and or rescheduling/reamortization with FmHA......... ____
7. Selling non-essential assets.. ____

8. Number of Borrowers Rejected because they could not show repayment after the five years set-aside period.. ____

9. Number of Borrowers Rejected because they could not project a positive cash flow using all available servicing actions including a set-aside.................................. ____

10. Number of Borrowers Rejected because of a County Committee decision.................. ____

11. Number of applications for set-aside withdrawn...................................... ____

12. Number of borrowers who appealed a negative set-aside decision....................... ____

13. Number of borrowers granted set aside.. ____

14. For borrowers granted set aside, total principal and interest prior to set aside (whole dollars only).. $____

15. Total amount set aside (whole dollars only)... $____

16. Number of borrowers granted set aside who were rescheduled at Limited Resource rates...... ____

C. CONTRACTING

	Farm Credit Analysts	Farm Management Specialists	Pilot Approved Lender Loan Servicing
a. Contracts signed during period	(17) ____	(18) ____	(19) ____
b. Dollar amount expended	(20)$____	(21)$____	(22)$____
c. Number of Farmers (unduplicated) Contractors served during period	(23) ____	(24) ____	(25) ____

D. APPLICATIONS FROM FINANCIAL INSTITUTIONS FOR APPROVED LENDER STATUS:

26. Number of applications received during the period.................... ____

27. Number of applications approved during the period.................... ____

28. Number of applications rejected during the period.................... ____

29. Number applications withdrawn during the period...................... ____

(Codes)

-- -- --
State Dist. County

ATTACHMENT I
Page 2

	Month	Day
Reporting Period: beginning	--	--
ending	--	--

E. GUARANTEES	APPROVED LENDERS	NON-APPROVED LENDERS
TYPE LENDER		
a. Number of Applications Received during period:		
for Regular Guarantees......................	(30)________	(31)________
for DAP Guarantees..........................	(32)________	(33)________
b. Number of Applications Approved during period:		
for Regular Guarantees......................	(34)________	(35)________
for DAP Guarantees..........................	(36)________	(37)________
c. Number of Applications Rejected during period:		
for Regular Guarantees......................	(38)________	(39)________
for DAP Guarantees..........................	(40)________	(41)________
d. Number of Applications Withdrawn during period:		
for Regular Guarantees......................	(42)________	(43)________
for DAP Guarantees..........................	(44)________	(45)________
e. Total Dollars of Principal and Interest before Debt Adjustment for DAP Guarantees only....	(46)$________	(47)$________
f. Amount of Principal Write-Off/DAP Guar. only..	(48)$________	(49)$________
g. ($) Value of Interest Rate Reduction Life of Loan - DAP Guarantee only..................	(50)$________	(51)$________
h. ($) Amount Guaranteed:		
for OPERATING purposes - regular...........	(52)$________	(53)$________
for OPERATING purposes - DAP...............	(54)$________	(55)$________
for FARM OWNERSHIP purposes - regular......	(56)$________	(57)$________
for FARM OWNERSHIP purposes - DAP..........	(58)$________	(59)$________
Guaranteed Applications on Hand Without County Committee Decisions: (END OF PERIOD)		
a. More than 1 week:		
Regular Guaranteed..........................	(60)________	(61)________
DAP Guaranteed..............................	(62)________	(63)________
b. More than 3 weeks:		
Regular Guaranteed..........................	(64)________	(65)________
DAP Guaranteed..............................	(66)________	(67)________
c. More than 6 weeks:		
Regular Guaranteed..........................	(68)________	(69)________
DAP Guaranteed..............................	(70)________	(71)________

ATTACHMENT II

FARM CREDIT INITIATIVE REPORTING SYSTEM (FCIRS)

Sign onto the Kansas City Computer Center as you normally do for entering the RCFTS, up to the entry of "EX RCFTS." At this point, in the sign-on process, enter "EX FCIRS" instead of "EX RCFTS." This will load the Farm Credit Initiative Reporting System's (FCIRS) processing routines.

When the main menu appears for FCIRS, the methods of entering data, moving from screen to screen, moving from record to record, producing reports and signing-off are the same as those for RCFTS. The differences between the two systems are that FCIRS has a single record per County per reporting period and the screen forms for FCIRS are the same as Farm Credit Initiative report forms.

FmHA AN No. 1157 (1980)

SUBJECT: Processing Applications for Guaranteed Loans March 13, 1985

TO: All FmHA State Directors, Farmer Programs Chiefs,
District Directors, County Supervisors, and Assistant
Administrator Accounting and Director, Finance Office

Purpose/Intended Outcome:

The purpose of this AN is to expedite the processing of Farmer Program guaranteed loan applications from approved lenders. It is necessary that such applications be handled both prudently and as rapidly as possible.

Implementation Responsibilities:

In order to accomplish this objective, the County Supervisor's responsibilities are set forth as follows:

(1) When an application for a guaranteed loan is received from an approved lender, the County Supervisor will immediately review the application for completeness and obvious errors. (As an example, an obvious error in the application means that prices or yields or asset values that are set forth in the application are not consistent with information being used by agricultural lenders in the area.) If the application is incomplete, contains obvious errors or erroneous assumptions have been identified, the application will not be denied but will be returned immediately to the lender for revision. When the application has been reconsidered by the lender, corrections made, and returned to the County Supervisor, it will again be reviewed immediately.

(2) Following the County Supervisor's review, acceptable applications will be presented to the County Committee for a determination of eligibility within five (5) working days after receiving the acceptable application.

(3) If a lender regularly submits incomplete, erroneous or unreasonable applications, the approved lender status will be reviewed by the State Director.

(4) The Debt Adjustment Program will be used only to process those applications for guaranteed loans, including applications from non-approved lenders, when the borrower's existing accounts have been classified as substandard or worse, i.e., identified as problem loans by the lender or the lender's supervising agency.

It is imperative that this processing procedure be followed if we are to provide the prompt relief necessary to the farming community.

FRANK W. NAYLOR, JR.
Under Secretary
for Small Community
and Rural Development

EXPIRATION DATE: December 31, 1985

FILING INSTRUCTIONS: Preceding FmHA Instructions 1980-B

Sent via electronic mail on 03/13/85 at 8:16 am by IMP.
This message should be promptly distributed to all County Supervisors and District Directors.

FMHA AN NO. 1146 (2000)

February 20, 1985

SUBJECT: Agreement Between the Extension Service (ES) and the Farmers Home Administration (FmHA)

TO: All FmHA State Directors
Assistant Administrator Accounting
and Director, Finance Office

PURPOSE/INTENDED OUTCOME: In the next few months great demands will be made of you to complete the Debt Adjustment Program and to provide regular operating and related credit to our farm borrowers. In some cases FmHA personnel would be unable to finish these tasks in a timely fashion. To assist you in accomplishing these tasks, FmHA has signed a Memorandum of Understanding (MOU) with ES allowing FmHA to utilize some of ES's employees.

COMPARISON WITH PREVIOUS AN: A similar program was put in place by FmHA AN No. 500 (1945), dated February 20, 1981. You may wish to refer to that program, but be advised that the purposes of this agreement are somewhat different.

IMPLEMENTATION RESPONSIBILITIES:

Under the terms of the MOU (attached) you are urged to work with State and local ES/Cooperative Extension Service (CES) managers in utilizing such ES/CES staff as may be available in your area. With your cooperation and willingness to make the agreement work, we can achieve significant savings and get our work done.

Each of you should therefore immediately begin to explore with your ES/CES counterpart how this agreement can best be carried out in your area.

Each State Director should report to the FmHA Administrator at the end of March on the level of success this project is having and on the amount of assistance being provided by ES/CES in their individual State.

Dwight O. Calhoun
DWIGHT O. CALHOUN
Associate Administrator

Attachment

EXPIRATION DATE:
March 31, 1986

FILING INSTRUCTIONS: Preceding FmHA Instruction 2000-B

Sent by Electronic Mail on February 21, 1985 , at 12:23 pm. by DASD (IMPS). The State Director should advise the District and County Offices.

AGREEMENT BETWEEN THE EXTENSION SERVICE (ES) AND THE FARMERS HOME ADMINISTRATION (FmHA)

On February 6, 1985, the Secretary of Agriculture announced farm credit relief measures designed to help financially stressed farmers through their temporary difficulties.

In order to carry out the direction of the Secretary, the Cooperative Extension Service(s) (CES) and the Farmers Home Administration (FmHA) have been asked to cooperate in every possible way to assist those farmers who have suffered severe economic reverses during prior years due to disasters and poor economic conditions.

The Secretary is fully aware of the special efforts of both Agencies that are currently underway, but has asked us to cooperate in specific areas in an effort to help farmers meet their immediate credit requirements.

As part of the farm credit relief measures, the Extension Service (ES) and FmHA can cooperate in the following areas:

- Extension services are already assisting and involved in "credit hot lines" in several States. FmHA will cooperate with ES as well as other State and local agencies in the establishment and operation of hot lines.
- Other USDA agencies have agreed to provide professional and/or clerical assistance to local and State FmHA offices wherever possible. In some cases Extension services may also be able to provide such assistance. This help would be on a nonreimbursable basis and would not jeopardize ongoing programs. Naturally this would be done on a case-by-case basis.
- State Extension services are urged to continue to assist FmHA in helping to locate farm credit and farm management specialists and to work with FmHA to focus their efforts in areas where there is the greatest need.

We urge State Directors for FmHA and CES to meet as soon as possible to discuss these credit relief measures and explore potential cooperative efforts.

Mary N Greenwood
MARY NELL GREENWOOD
Administrator
Extension Service

DATE: FEB 15 1985

Dwight O. Calhoun
DWIGHT O. CALHOUN
Acting Associate Administrator
Farmers Home Administration

FmHA AN No. 1140 (1951)

February 4, 1985

SUBJECT: Farm Credit Initiative Program

TO: All State Directors, District Directors
and County Supervisors, FmHA

This Administrative Notice (AN) is to provide guidance to field offices on the preparation and submission of documents prepared in conjunction with the debt set-aside portion of the President's Farm Credit Initiative Program.

Form FmHA 1951-4, Change in Rates and Terms.

o Prepare Form FmHA 1951-4 in accordance with the forms manual insert (FMI) for consolidating, rescheduling, or reamortizing regardless of whether or or not the loan(s) are on debt set-aside.

o Even though the installment schedule on Form FmHA 1951-4 will not reflect the amount of debt set-aside reduction, THE INSTALLMENTS SHOWN ON THE PROMISSORY NOTE (FORM FmHA 1940-17) must reflect the amount of debt set-aside reduction.

o If the loans being consolidated will be at a limited resource rate, put a RED "LR" on the top of the Form FmHA 1951-4.

o The Finance Office will begin to process Form FmHA 1951-4 immediately upon receipt; however, based on the large volume anticipated, we expect to need 5-6 months to complete processing.

Form FmHA 1951-6, Borrower Account Description Flag.

o Prepare one Form FmHA 1951-6 for each borrower who will have part of his/her loan indebtedness set aside. DO NOT PREPARE A FORM FOR EACH LOAN.

o Fully complete the form:

1. Show the total amount of principal to be set aside (Block 9).

2. The effective date must be the same date as the effective date of consolidation, rescheduling, or reamortization - Form FmHA 1951-4, Change in Rates and Terms (Block 9).

3. The set-aside expiration date must exceed the set-aside effective date by exactly 5 years (Block 9 -- i.e., December 12, 1984, effective date, December 12, 1989, expiration date).

o Upon receipt of Form FmHA 1951-6, the Finance Office will flag the borrower's account. Once this flag has been established, the computer system will hold in suspense all transactions effective after the effective date of the debt set-aside until the Form FmHA 1951-14, Debt Set-Aside, and Form FmHA 1951-14A, Full Debt Set-Aside Installment Information, have been processed by the Finance Office.

o The Finance Office expects to have the capability to process Form FmHA 1951-6 in January 1985.

o Attached is a copy of Form FmHA 1951-6 which can be reproduced as necessary until a supply is received.

Form FmHA 1951-14, Debt Set-Aside.

o This form will be prepared in accordance with the FMI for each borrower receiving a debt set-aside.

Please note that only one loan will be permitted to be partially set aside. This form will also be used to furnish installment information for the loan partially set aside.

o This form will be retained by the Finance Office until the capability to process the debt set-aside transaction is completed in April 1985. Upon processing the set-aside transaction, all transactions held in suspense will be processed to the borrower's account.

o At the expiration/termination of the set-aside, the system will automatically consolidate the set-aside portion with the applicable loan and increase the annual installments accordingly. No further action will be required by county offices.

o Attached is a copy of Form FmHA 1951-14 which can be reproduced as necessary until a supply is received.

Form FmHA 1951-14A, Full Debt Set-Aside Installment Information.

o This form will be completed in accordance with the FMI to provide installment information for those loan(s) fully set aside.

o Attached is a copy of Form FmHA 1951-14A which can be reproduced as necessary until a supply is received.

Submission of Documents to the Finance Office.

To expedite processing and facilitate control, all documents prepared in conjunction with the debt set-aside review--Forms FmHA 1951-4 for nondebt set-aside borrowers and Forms FmHA 1951-6, 1951-4, 1951-14 ,and/or 1951-14A for debt set-aside borrowers--should be mailed together in a separate envelope addressed as follows: (Staple documents for each borrower together.)

United States Department of Agriculture
Farmers Home Administration
1520 Market Street
St. Louis, MO 63103

OPEN BY ADDRESSEE ONLY - ATTN: FC-340

Above the return address on the envelope, please record in RED "DEBT SET-ASIDE (State Code)."

GENERAL INFORMATION.

Program Cost Items. Program cost items associated with operating loans are established as separate loans. They are assigned numbers starting at 98, descending to 70. While these cost items are considered in the borrower's overall indebtedness, it is important to note that these cost items cannot be reamortized, rescheduled, or consolidated nor can they be set aside.

Inquiry Station. The county office can obtain unpaid balances from the Inquiry Station for a borrower's loan after Form FmHA 1951-6 has been processed and before the new debt set-aside form is processed. The Inquiry Station will record the request as a problem case. They will research the account, manually compute account balances, and advise the County Office accordingly.

Delinquency Reporting. In January 1985, the Finance Office will have the systems capability of processing the Form FmHA 1951-6 to flag the account for special debt set-aside. By flagging the account (a) transactions dated subsequent to the effective date of the Form FmHA 1951-6 are suspended until the debt set-aside transaction is developed and processed and (b) the account will not be reported as delinquent. Form FmHA 389-375, Active Borrowers Delinquent (Report Code 616), and Form FmHA 389-184, Status Report of Farm Real Estate Accounts (Report Code 541), will not include these borrowers as delinquent once the Form FmHA 1951-6 processes. After the debt set-aside transaction is processed, the borrower's status on loans will be reported as normal.

Form FmHA 450-10, Advice of Borrower's Change of Address or Name. If the debt set-aside transaction has not been processed by the Finance Office when you are submitting this form, special handling is required. Please submit Form FmHA 450-10 as previously instructed for the submission of the other debt set-aside related forms. In addition, write "DEBT SET-ASIDE" across the top of Form FmHA 450-10 in RED. This will assure proper handling by the Finance Office.

DWIGHT D. CALHOUN
Associate Administrator

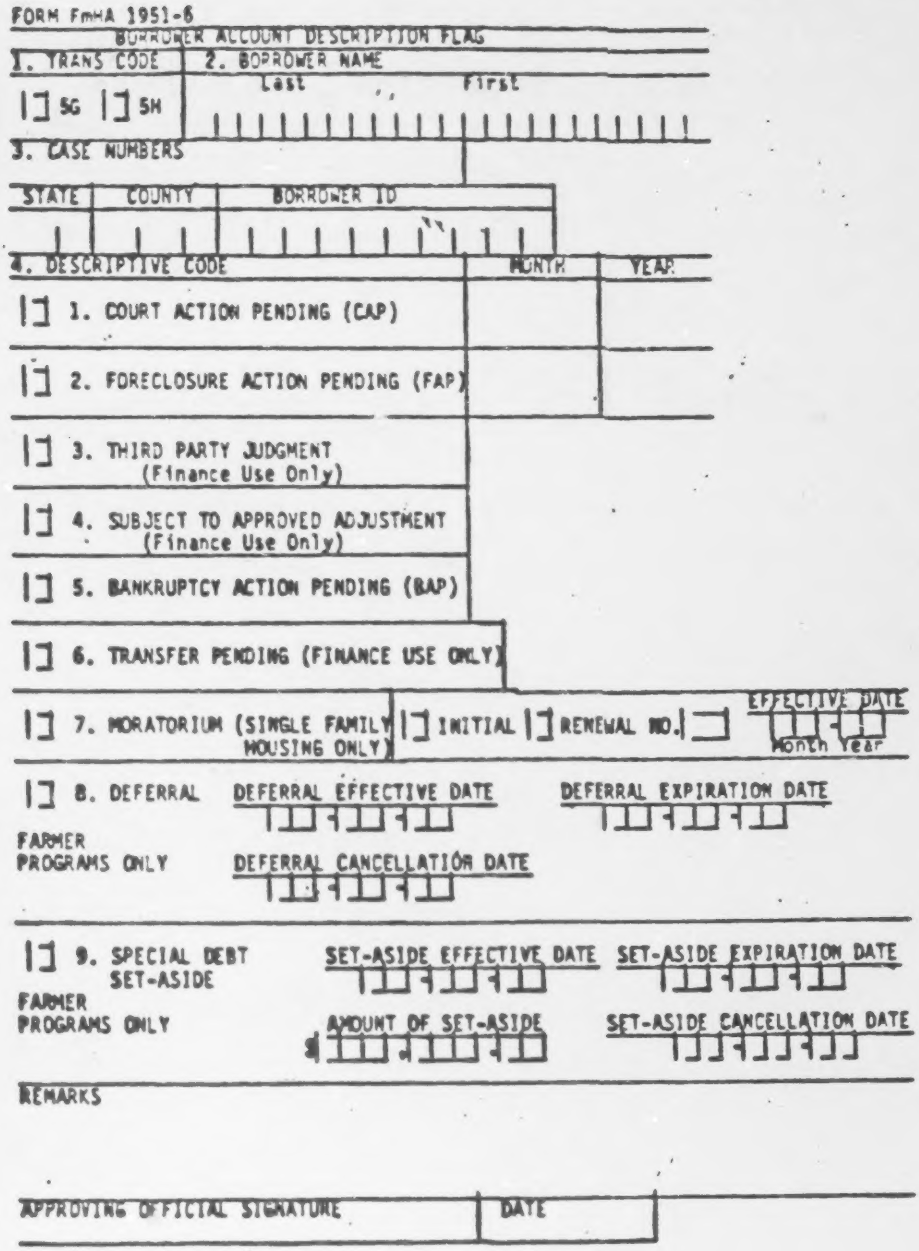
3 Attachments

NOTE: A new Form FmHA 1965-22, Information on Assumption and/or Change of Terms, is currently being developed to replace Form FmHA 1951-4 and Form FmHA 1960-6, Assumption Agreement. Once this form is issued its immediate use will be required since it will expedite the processing of reamortizations, reschedulings, and consolidations by the Finance Office.

EXPIRATION DATE: September 30, 1985

FILING INSTRUCTIONS: Preceding FmHA Instruction 1951-A

ATTACHMENT I



FORM FmHA 1951-6

BORROWER ACCOUNT DESCRIPTION FLAG

1. TRANS CODE
☐ 5G ☐ 5H

2. BORROWER NAME
Last , First

3. CASE NUMBERS

STATE	COUNTY	BORROWER ID

4. DESCRIPTIVE CODE

	MONTH	YEAR
☐ 1. COURT ACTION PENDING (CAP)		
☐ 2. FORECLOSURE ACTION PENDING (FAP)		

☐ 3. THIRD PARTY JUDGMENT (Finance Use Only)

☐ 4. SUBJECT TO APPROVED ADJUSTMENT (Finance Use Only)

☐ 5. BANKRUPTCY ACTION PENDING (BAP)

☐ 6. TRANSFER PENDING (FINANCE USE ONLY)

☐ 7. MORATORIUM (SINGLE FAMILY HOUSING ONLY) ☐ INITIAL ☐ RENEWAL NO. ☐ EFFECTIVE DATE Month Year

☐ 8. DEFERRAL FARMER PROGRAMS ONLY

DEFERRAL EFFECTIVE DATE

DEFERRAL EXPIRATION DATE

DEFERRAL CANCELLATION DATE

☐ 9. SPECIAL DEBT SET-ASIDE FARMER PROGRAMS ONLY

SET-ASIDE EFFECTIVE DATE

SET-ASIDE EXPIRATION DATE

AMOUNT OF SET-ASIDE $

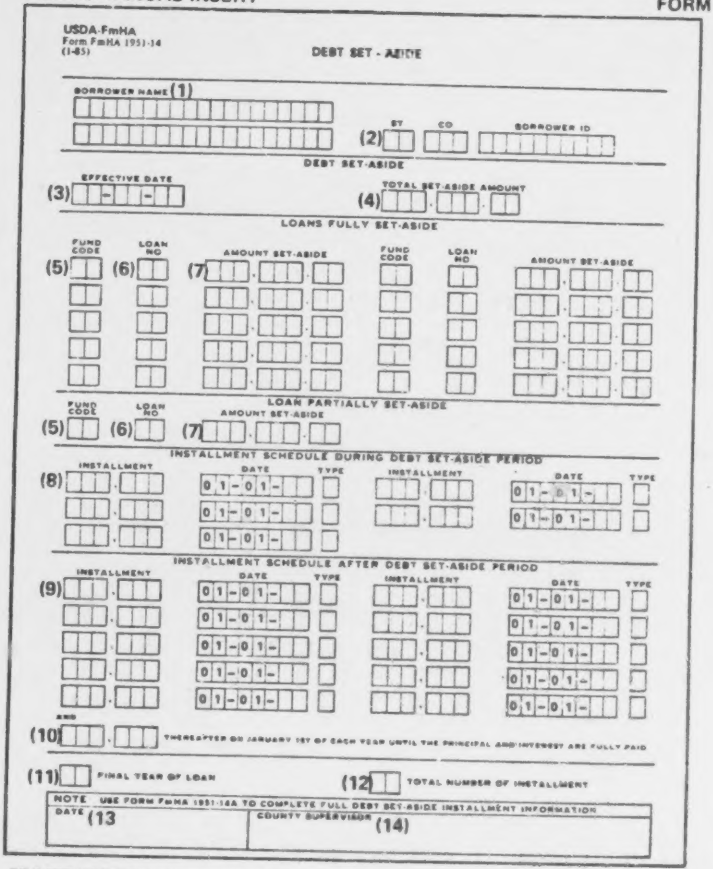
SET-ASIDE CANCELLATION DATE

REMARKS

APPROVING OFFICIAL SIGNATURE	DATE

ATTACHMENT II

FORMS MANUAL INSERT **FORM FmHA 1951-14**



USDA-FmHA
Form FmHA 1951-14
(1-85)

DEBT SET - ASIDE

BORROWER NAME (1)

(2) ST CO BORROWER ID

DEBT SET-ASIDE

(3) EFFECTIVE DATE - -

(4) TOTAL SET-ASIDE AMOUNT . .

LOANS FULLY SET-ASIDE

(5) FUND CODE (6) LOAN NO (7) AMOUNT SET-ASIDE . . FUND CODE LOAN NO AMOUNT SET-ASIDE . .

LOAN PARTIALLY SET-ASIDE

(5) FUND CODE (6) LOAN NO (7) AMOUNT SET-ASIDE . .

INSTALLMENT SCHEDULE DURING DEBT SET-ASIDE PERIOD

(8) INSTALLMENT . DATE 01-01- TYPE INSTALLMENT . DATE 01-01- TYPE

INSTALLMENT SCHEDULE AFTER DEBT SET-ASIDE PERIOD

(9) INSTALLMENT . DATE 01-01- TYPE INSTALLMENT . DATE 01-01- TYPE

AND

(10) . THEREAFTER ON JANUARY 1ST OF EACH YEAR UNTIL THE PRINCIPAL AND INTEREST ARE FULLY PAID

(11) FINAL YEAR OF LOAN (12) TOTAL NUMBER OF INSTALLMENT

NOTE USE FORM FmHA 1951-14A TO COMPLETE FULL DEBT SET-ASIDE INSTALLMENT INFORMATION

DATE (13 COUNTY SUPERVISOR (14)

PROCEDURE FOR PREPARATION : FmHA Instructions 1951-A, 1951-G, 1955-A, and 1962-A.

PREPARED BY : County Supervisor, District Director, or State Director (or designee).

NUMBER OF COPIES : Original and one copy.

SIGNATURES REQUIRED : FmHA employee authorized to take the specific servicing action (County Supervisor, District Director, or State Director (or designee).

DISTRIBUTION OF COPIES : Original to Finance Office, copy retained by initiating office.

INSTRUCTIONS FOR PREPARATION

(1) Enter the borrower's name.

(2) Enter the borrower's case number, consisting of the state and county code and the borrower's identification number.

(3) Enter the effective date of the loans being set aside from Exhibit F of FmHA Instruction 1951-A. This should agree with the effective date on the Form FmHA 1951-6 (Block 9).

(4) Enter the total amount debt being set aside. The amount cannot exceed $200,000 or 25%, whichever is less, of the borrower's insured farm loan indebtedness to FmHA on the effective date of the set-aside. This amount should agree with the amount on the Form FmHA 1951-6.

(5) Enter the fund code(s) of the loan(s) being set aside.

(6) Enter the loan number(s) of the loan(s) being set aside.

(7) Enter the amount of the loan being partially set aside. *Only one loan will be partially set-aside. It can be either a Farmer Program real estate or operating loan.*

(8) For Farmer Program partially set-aside real estate loans *during* debt set-aside period:

Enter the amount, year, and a type 1 code for the first installment. This installment will be interest accrued through the next January 1st.

Enter the amount, year, and a type 1 code for the installments due during the remaining debt set-aside period. These installments will be the regular amortized installments.

For Farmer Program partially set-aside operating loans *during* debt set-aside period:

Enter the amount, year, and a type 1 code for the first installment. This installment will be interest accrued through the next January 1st.

Enter the amount, year, and type 1 code for all the scheduled unequal and/or amortized installments in sequential order due during the remaining debt set-aside period.

NOTE: Round all installments with cents to the next dollar and enter in the columns from left to right.

(9) For Farmer Program partially set-aside real estate loans *after* debt set-aside period:

Enter the amount, year, and a type 1 code for the first installment. This installment will be the total of the regular amortized amount due on the portion of the loan not set-aside, interest only through January 1st due on the portion of the loan set-aside.

Enter the amount, year, and a type 2 code for the second installment. This installment will be the total of the regular amortized amount due on the portion of the loan not set-aside and the regular amortized amount due on the portion of the loan set-aside.

For Farmer Program partially set-aside operating loans *after* debt set-aside period:

Enter the amount, year, and a type 1 code for the first installment in figures. This installment will be the total of the scheduled unequal or amortized amount due on the portion of the loan not set-aside and at a minimum interest only through January 1st due on the portion of the loan set-aside.

Enter the amounts, due date years, and type 1 codes in sequential order for remaining installments, except a type 2 code will be entered on the final scheduled installment. These installments will be the total of the scheduled unequal and/or amortized amounts due on the portion of the loan not set-aside, and the scheduled unequal and/or amortized amounts due on the portion of the loan set-aside.

NOTE: Round all installments with cents to the next dollar and enter in the columns from left to right.

(10) Enter the amount of equal amortized real estate installments which come due following the installments shown in Item (9). If none, enter "0".

(11) Enter the final year of the loan partially set aside.

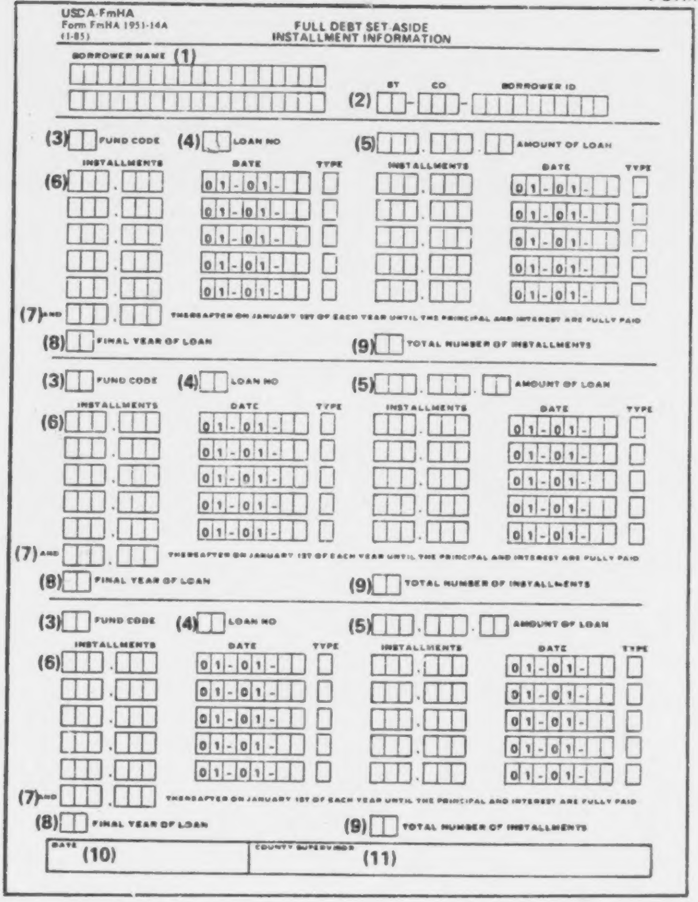
(12) Enter the total number of installments provided in Items (8) and (9) plus 1.

(13) Enter the date approved by the County Supervisor.

(14) Signature of the County Supervisor.

ATTACHMENT III

FORMS MANUAL INSERT **FORM FmHA 1951-14A**



USDA-FmHA
Form FmHA 1951-14A
(1-85)

FULL DEBT SET-ASIDE
INSTALLMENT INFORMATION

BORROWER NAME (1)

(2) ST - CO - BORROWER ID

(3) FUND CODE (4) LOAN NO (5) . . AMOUNT OF LOAN

	INSTALLMENTS	DATE	TYPE	INSTALLMENTS	DATE	TYPE
(6)	.	01-01-	☐	.	01-01-	☐
	.	01-01-	☐	.	01-01-	☐
	.	01-01-	☐	.	01-01-	☐
	.	01-01-	☐	.	01-01-	☐
	.	01-01-	☐	.	01-01-	☐

(7) AND . THEREAFTER ON JANUARY 1ST OF EACH YEAR UNTIL THE PRINCIPAL AND INTEREST ARE FULLY PAID

(8) FINAL YEAR OF LOAN (9) TOTAL NUMBER OF INSTALLMENTS

(3) FUND CODE (4) LOAN NO (5) . . AMOUNT OF LOAN

	INSTALLMENTS	DATE	TYPE	INSTALLMENTS	DATE	TYPE
(6)	.	01-01-	☐	.	01-01-	☐
	.	01-01-	☐	.	01-01-	☐
	.	01-01-	☐	.	01-01-	☐
	.	01-01-	☐	.	01-01-	☐
	.	01-01-	☐	.	01-01-	☐

(7) AND . THEREAFTER ON JANUARY 1ST OF EACH YEAR UNTIL THE PRINCIPAL AND INTEREST ARE FULLY PAID

(8) FINAL YEAR OF LOAN (9) TOTAL NUMBER OF INSTALLMENTS

(3) FUND CODE (4) LOAN NO (5) . . AMOUNT OF LOAN

	INSTALLMENTS	DATE	TYPE	INSTALLMENTS	DATE	TYPE
(6)	.	01-01-	☐	.	01-01-	☐
	.	01-01-	☐	.	01-01-	☐
	.	01-01-	☐	.	01-01-	☐
	.	01-01-	☐	.	01-01-	☐
	.	01-01-	☐	.	01-01-	☐

(7) AND . THEREAFTER ON JANUARY 1ST OF EACH YEAR UNTIL THE PRINCIPAL AND INTEREST ARE FULLY PAID

(8) FINAL YEAR OF LOAN (9) TOTAL NUMBER OF INSTALLMENTS

DATE (10)	COUNTY SUPERVISOR (11)

PROCEDURE FOR PREPARATION	: FmHA Instructions 1951-A, 1951-G, 1955-A, and 1962-A.
PREPARED BY	: County Supervisor, District Director, or State Director (or designee).
NUMBER OF COPIES	: Original and one copy.
SIGNATURES REQUIRED	: FmHA employee authorized to take the specific servicing action (County Supervisor, District Director, or State Director (or designee).
DISTRIBUTION OF COPIES	: Original to Finance Office, copy retained by initiating office.

INSTRUCTIONS FOR PREPARATION

(1) Enter the borrower's name.

(2) Enter the borrower's case number, consisting of the state and county code and the borrower's identification number.

(3) Enter the fund code of the loan being fully set aside.

(4) Enter the loan number of the loan being fully set aside.

(5) Enter the total amount of the loan being fully set aside, as shown on Form FmHA 1951-14, "Debt Set-Aside."

(6) For Farmer Program fully set-aside real estate loans after debt set-aside period:
Enter the amount, year, and a type 1 code for the first installment. This installment will be the interest due through January 1st.

Enter the amount, year, and a type 2 code for the regular amortized installment. This installment will be the regular amortized amount due on the loan set-aside.

For Farmer Program fully set-aside operating loans after debt set-aside period:
Enter all scheduled unequal and/or amortized amounts, due date years, and type 1 codes in sequential order, except a type 2 code will be entered on the final scheduled installment. The first installment will include , at a minimum, any interest due through January 1st.

NOTE: Round all installments with cents to the next dollar and enter in the columns from left to right.

(7) Enter the amount of the equal amortized real estate installments which become due following the installments shown in Item (6). If non enter 0.

(8) Enter the final year of the loan.

(9) Enter the total number of installments provided in Item (6) plus 1.

(10) Enter the date of approval by the County Supervisor.

(11) Signature of the County Supervisor.

FMHA AN No. 1134 (1951)

January 17, 1985

SUBJECT: Revised Farm Credit Initiative Report

TO: All State Directors, District Directors, and County Supervisors

Due to the urgent need for timely information, the reporting schedule for the Farm Credit Initiative Report (FmHA AN No. 1108, dated November 23, 1984) has been changed. Effective February 1, 1985, this report will be submitted four times each month, on the 8th, 15th, 22nd, and last day of each month. The report due on the 8th will reflect activity from the 1st through the 8th; the report due on the 15th will reflect activity from the 9th through the 15th; etc. The report due on the last day of the month will reflect activity from the 23rd through the end of the month, not total activity for the month.

The form has been revised slightly to make it easier to use. In addition, three items have been added at the request of County and National office staff (Part I, D 1 and F, and Part IV, G). The information collected in Part IV, G, will obsolete the reporting requirement contained in FmHA AN No 1131(1980). These items will provide useful management information and indicate additional work that is being performed in the field. Copies of the revised form are attached. This revised form should be used beginning with the report due for February 8.

Only County offices should complete this form. Negative reports are required. Zeros do not need to be inserted--those fields may be left blank. Be sure to complete County office codes and reporting dates as indicated on the top of the form. If a report is not received within seven days after the end of a reporting period, National office staff will contact the County office. If there are any questions call FTS 475-4618 or commercial 202-475-4618.

Charles W Shuman

CHARLES W. SHUMAN
Administrator

Attachments

EXPIRATION DATE: September 30, 1985

FILING INSTRUCTIONS: Preceding FmHA Instruction 1951-A

(Codes) Reporting Period: Month Day
beginning __ __

__ __ __
State Dist. County end __ __

FARM CREDIT INITIATIVE REPORT

I. DEBT SET ASIDES
(Activity During the Period)

A. Number of notification letters sent to borrowers (FmHA Instruction 1951-A, Exhibit C-1)............................____
B. Number of borrowers requesting set asides.........................____
C. Number of borrowers rescheduled/reamortized without set aside:

  1. At regular rates...____
  2. At Limited Resource Rates.......................................____

D. Number of borrowers rejected for set aside because:

  1. Could project a positive cash flow without servicing actions..____
  2. Could project a positive cash flow without set aside by:

    a. Debt adjustment by other lenders..........................____
    b. Rescheduling/reamortization at regular interest rate......____
    c. Rescheduling/reamortization at Limited Resource rate......____
    d. Debt adjustment by other lenders and rescheduling/reamortization with FmHA...____
    e. Selling non-essential assets..............................____

  3. Could project a positive cash flow with set aside but not repayment of the set aside after five years..................____

  4. Could not project a positive cash flow using all available servicing actions...____

  5. County Committee decision.......................................____

E. Total number of borrowers rejected for set aside..................____

F. Number of applications for set-aside withdrawn....................____

G. Number of borrowers who appealed decision.........................____

H. Number of borrowers granted set aside.............................____

I. For borrowers granted set aside, total principal and interest prior to set aside..____

J. Total amount set aside..____

K. Number of borrowers granted set aside who were rescheduled at Limited Resource rates...____

L. Number of delinquent borrowers granted set aside..................____

(Codes)			Reporting Period:	Month	Day
--	--	--	beginning	--	--
State	Dist.	County	end	--	--

II. CONTRACTING

	Farm Credit Analysts	Farm Management Specialists	Pilot Approved Lender Loan Servicing
a. Contracts signed during period	____	____	____
b. Dollar amount	____	____	____
c. Contracts in force end of period	____	____	____
d. Farmers served during period	____	____	____

III. Number of lenders approved during the period for the Approved Lender Program (APL)..____

IV. GUARANTEES -- Questions refer to "Debt Adjustment Program" (DAP) only, EXCEPT FOR QUESTION G that refers to all applications received under the Approved Lender Program (APL). (Activity During the Period)

A. Number of borrowers reviewed...____

B. Number of borrowers rejected...____

C. Number of loans approved...____

D. Total principal and interest before write-off.......................____

E. Amount written-off...____

F. Amount guaranteed: OL purposes.......................................____
FO purposes.......................................____

G. Applications for loan guarantees under the Approved Lender Program (APL) that have been on hand:
under 2 weeks ___ 2-3 weeks ___ 3-4 weeks ___ 4-5 weeks ___ longer ___

H. For banks receiving guarantees during the period:

Bank Name	Zip Code (9 digits)	Routing Number	Number of Loans	Amount Guaranteed

FMHA AN No. 1133 (1940)

January 17, 1985

SUBJECT: Obligating and/or Requesting Loan and Grant Funds

TO: All State Directors, FmHA

In December 1983 State Offices were provided the capability to obligate and/or request loan and grant funds through terminals. My objectives for implementing this remote terminal entry system were to ensure timely and efficient obligation and disbursement of loan and grant funds and to provide you the capability to monitor/track your program allocations. As I am sure you will all attest, this effort has met with much success for all users of the system.

Operational inefficiencies related to the learning curve in processing transactions through the terminal system have been successfully overcome to the extent that maximum processing results are now being achieved. Therefore, I believe it is now time to direct your efforts towards my overall objective of processing all requests for obligations and/or check requests through the State Office. To meet that objective, I urge each of you to take the necessary actions to assure that all obligation and check request transactions are being processed through the State Office terminal system by January 1985.

Obligation requests for community program loans and grants, multiple family housing loans, business and industry loans, and Appalachian Regional Commission grants should no longer be telephoned to the Finance Office. For these loan and grant types, the Finance Office will no longer provide State Offices with telephone notification of obligation dates since this information is readily available by the use of the ADPS status inquiry function. Statuses may be obtained by the State Office by using Option 3, "Status Inquiry," on the ADPS menu screen.

You should continue to comply with the provisions of FmHA Instruction 2015-C, Announcement of Approval of Loans, Grants, or Guaranteed Loans for Rural Projects, and applicable program instructions by notifying the Legislative Affairs and Public Information Staff that insured or guaranteed funding authority has been reserved.

Additionally, your field offices should no longer submit a simultaneous check request and loan closing on Form FmHA 440-57, Acknowledgement of Obligated Funds/Check Request, to the Finance Office for processing.

Field offices should request the check through the State Office terminal system in accordance with State instructions and submit the loan closing on a separate Form FmHA 440-57 to the Finance Office for processing.

The Finance Office will continue to provide manual emergency processing capabilities if the State Office terminal system is not operational for an extended period. In these instances the State Office should mail the obligation and check request documents with a transmittal letter of explanation to the following address:

Farmers Home Administration
Operations Division, FC-350
Attn: Gloria Burns
1520 Market Street
St. Louis, Missouri 63103

If technical assistance is required for processing transactions through the terminal system, please telephone the Finance Office Field Office Assistance Unit. Telephone numbers are as follows:

From offices in the continental United States, Alaska, Puerto Rico, or Hawaii WITH ACCESS TO FTS, dial FTS:	279-6033
From offices in the continental United States and Puerto Rico (except Missouri) WITHOUT ACCESS TO FTS, dial Toll Free:	1-800-325-7164
From offices in Missouri WITHOUT ACCESS TO FTS, dial Toll Free:	1-800-392-7209
From offices in Alaska, Hawaii, and the Virgin Islands WITHOUT ACCESS TO FTS, dial:	1-314-425-6033

Your cooperation in this matter will be greatly appreciated.

CHARLES W. SHUMAN
Administrator

EXPIRATION DATE: December 31, 1985

FILING INSTRUCTIONS: Preceding FmHA Instruction 1940-G

FmHA AN No. 1131 (1980)

SUBJECT: Monitoring the Processing Time of Applications Received Under the Approved Lender Program (ALP).

January 9, 1985

TO: All State Directors; Chiefs, Farmer Programs; District Directors; and County Supervisors, FmHA

The intent of the Farmer Home Administration (FmHA) Approved Lender Program (ALP) for guaranteed farmer program loans is to minimize the time required by lenders in obtaining a response from FmHA to obtain a contract of guarantee or loan note guarantee. However, many lenders have expressed their concern that applications for FmHA guaranteed loans are not being processed on a timely basis.

In order to further expedite the processing of guaranteed loan requests from ALP lenders, County Supervisors will immediately determine whether all materials required under the ALP agreement have been furnished by the lender. If the package is not complete, the lender will be immediately advised of the application package deficiency. Complete application packages will be submitted promptly to the County Committee for eligibility determination only.

The review of the completed application by the County Supervisor usually will be limited to the following:

1. whether the proposed loan is for authorized purposes and consistent with the Instructions;
2. whether there is reasonable assurance of repayment ability; and
3. whether there is sufficient collateral and equity.

To expedite the review, the County Supervisor should not transfer any data to FmHA forms or in any way revise any work done by the ALP lender.

Subpart B of FmHA Instruction 1980 requires FmHA County Supervisors to make their determination on ALP lender requests for a contract of guarantee or loan note guarantee within 2 weeks of receipt of a completed application.

To assure that applications for guaranteed loans are acted on within the required time, State Directors will require District Directors to submit a weekly report to the State Office showing the aging of applications for guaranteed loans (by weekly intervals). State Directors will take appropriate action to expedite the processing of applications in County Offices where applications are not being processed within the required 14 day period.

State Directors will forward a monthly summary of the District Directors reports to the National Office (ATTN: Assistant Administrator Farmer Programs) along with an explanation of actions taken or to be taken to expedite the processing of requests where offices are not meeting the required 14 day processing time.

CHARLES W. SHUMAN
Administrator

Sent via electronic mail on Jan. 9, 1985 at 5:41 p.m.
by DASD(IMPS).

This message should be promptly distributed to all County Supervisors and District Directors.

EXPIRATION DATE:
January 31, 1986

FILING INSTRUCTIONS:
Preceeding FmHA Instructions 1980-B

SUBJECT: Obligation of Loans Under the Guaranteed Debt Adjustment Program (DAP)

OCT 26 1984

TO: All State Directors, FmHA

Due to software not being in place in the Finance Office, all obligations pertaining to codes 33 and 49 should not be entered into the system through terminals at the State level until further notice. All DAP obligations will be mailed to:

Farmers Home Administration
Fiscal Accounting Branch FC-360C2
Attn: Jim Likes
1520 Market Street
St. Louis, Missouri 63103

MICHAEL E. BRUNNER

CHARLES W. SHUMAN
Administrator

To be sent electronic mail on Oct. 26, 1984 at 4:00pm by DASD/IMP
A copy of this communication will be distributed to all County Supervisors and District Directors.

GUARANTEED LOAN PROGRAMS; FINAL RULE

[From the Federal Register, Friday, February 15, 1985]

DEPARTMENT OF AGRICULTURE

Farmers Home Administration

7 CFR Part 1980

Guaranteed Loan Programs

AGENCY: Farmers Home Administration, USDA

ACTION: Final rule.

SUMMARY: The Farmers Home Administration (FmHA) amends its regulations to add a debt adjustment program (DAP) for guaranteed operating (OL) and farm ownership (FO) loans. This amendment is needed to provide the policies and procedures for establishing the DAP to provide lenders with a tool to enable them to continue to provide credit to farmers who do not now have adequate security and/or ability to repay their loans. Guarantees under this amendment would be limited to those loans which are classified as substandard or worse. The intended effect of this action is to provide assistance to both lenders and their farm borrowers in a time of financial difficulty.

EFFECTIVE DATE: February 15, 1985.

FOR FURTHER INFORMATION CONTACT: Chester Bailey, Senior Loan Officer, Emergency Division, Farmers Home Administration, USDA, Room 5424, South Agriculture Building, 14th and Independence Avenue SW., Washington, D.C. 20250, telephone (202) 382–1642.

The Regulatory Impact Analysis is available in the Directives Management Branch (DMB) of the Farmers Home Administration (FmHA), Room 6348, South Agriculture Building, Washington, D.C. 20250.

SUPPLEMENTARY INFORMATION: This final action has been reviewed under USDA procedures established in Departmental Regulation 1512–1, which implements Executive Order 12291, and has been determined to be major because it will have an annual effect on the economy of $100 million or more.

This final rule implements one of the four Farm Credit Initiatives announced by President Ronald Reagan on September 18, 1984.

Memorandum of Law

Subject: Federal Register document for 7 CFR 1980—Subpart A, B, Guaranteed Loan Programs.

The changes to FmHA regulations contained in this Federal Register document have been reviewed by the Office of the General Counsel and determined to be within the scope of FmHA authority. The provisions in Subpart B, Exhibit B, of Part 1980 are consistent with FmHA's authority to guarantee loans at 7 U.S.C. 1921 et seq. The Secretary's general rulemaking and delegation authority for Part 1980 is furnished by 7 U.S.C. 1989.

Daniel Oliver,

General Counsel.

This regulation does not directly affect any FmHA programs or projects which are subject to intergovernmental consultation.

The Catalog of Federal Domestic Assistance numbers are 10.406 Farm Operating Loans and 10.407 Farm Ownership Loans.

This document has been reviewed in accordance with 7 CFR Part 1940, Subpart G, "Environmental Program." It is the determination of FmHA that this action does not constitute a major Federal action significantly affecting the quality of the human environment, and in accordance with the National Environmental Policy Act of 1969, Pub. L. 91–190, an Environmental Impact Statement is not required.

FmHA implemented the DAP upon publication by interim rule in the **Federal Register** [49 FR 41223] on October 19, 1984. That proposal provided for a 30 day comment period. The comment period ended November 19, 1984. Comments were received from 12 individuals and organizations. Follow-up correspondence and/or dialogue has occurred with some respondents and changes or revisions have been made as a result of a review of the comments.

The following is a discussion of the comments received from 1 farmer; 2 FmHA employees; 1 college professor; 3 lending institutions; 2 lenders' trade associations; and two public interest groups.

The farmer stated that he was very pleased to hear that something was being done to help financially distressed farmers. The respondent wrote "Our future and our children's future depend on whether FmHA will assist us in correcting our problems and the problems of other farmers likewise." He gave no recommendations to further improve on DAP.

Two FmHA employees were of the opinion that the prohibition on not permitting a reduced level of interest rate in lieu of an additional write off to create a positive cash flow in Exhibit B, paragraph II B is self defeating in assisting lenders and farmers. One employee wrote "Why should a banker agree to write off much below the current value of the security in order to make it cash flow when a decreased interest rate will do the same thing?"

A college professor wrote "The most serious problem with the regulations rests with the provision on page 41225 of the Federal Register (§ 1980.101, Exhibit B, paragraph II (B) of CFR)." He suggested that lenders be permitted to substitute a reduced level of interest rate charge for reductions in loan principal in order to meet the cash flow requirements. He also suggested that the required cash flow be set at 100 percent rather than 110 percent.

One lender wrote "We would find it far preferable to utilize lower interest rates to make an individual farming operation cash flow after the mutual 10 percent write down." The lender further stated that prohibiting a reduction in the interest rate in lieu of an additional write-off to create a positive cash flow would jeopardize the acceptance of the DAP.

The second lender wrote "We would like to say that we appreciate the fact that you recognize Midwest farmers are experiencing serious economic problems." It recommended that the lender be allowed to substitute a reduced interest rate for all or part of the requested write off. The lender stated that "fewer farmers will be served if the only option presented to the lender is a 10 percent write off of principal." The third lender also wrote that prohibiting interest rate reductions in lieu of write-off would be "unduly harsh for the lender."

One lenders' trade association wrote that the lender should be permitted to "bring the loan to a positive cash flow position through a downward adjustment of the interest rate." They also questioned whether a positive cash flow under DAP should include a 10 percent surplus; that a guarantee level of less than 90 percent would only serve to discourage participation in the program; that the one percent guarantee fee should be dropped; and that "partial payments against the guarantee prior to the completion of loan liquidation" be permitted.

The second lenders' trade association wrote that it supports the principle of the DAP because it will "offer a tool to allow some lenders to continue to provide credit to a number of farmers who do not presently have the ability to repay their loans." However, the association recommended that the DAP permit a reduction of interest rate in exchange for a 90 percent guarantee; that the one percent guarantee fee should not be passed on to the borrower; that the borrower must be required to adhere to a closely monitored, austere operating program; allow for early disbursements of guarantee proceeds based on expected liquidation values and that the regulations "make clear that the program is open to borrowers who will have both a positive cash flow and a high prospect for full debt repayment if they are provided this assistance;" and that the DAP permit an adjustable interest rate.

We agree that lenders should be given the option to substitute a reduced level of interest in lieu of a writeoff and we have, therefore, incorporated this provision in this final rule. We do not believe that the cash flow provision should be reduced. We believe that a planned 10 percent cash flow margin is reasonable. A 10 percent margin is necessary because of the uncertainty and instability of prices, costs and natural disasters. We believe that a 10 percent margin in a projected cash flow is a realistic planning margin for developing a reasonable long term workout plan. FmHA rules and regulations currently permit a lender conducting a liquidation of a guaranteed loan to receive, upon request, an estimated loss settlement provided the lender applies such request to the outstanding principal balance owed on the guaranteed debt. FmHA believes that the 1 percent fee should be charged to the lender to cover administrative costs and any potential loss to FmHA. The interim rule allowed variable interest rates to be used, but in order to eliminate any confusion about this, the final rule clearly states that variable rates can be used.

One public interest group wrote "that requiring a debt writeoff as proposed in the interim rule will not be in the long term best interest of the borrower, nor will it be equitable to other borrowers." The respondent also suggested that FmHA investigate the potential of issuing government bonds to cover part of the value of mortgages a farm credit institution holds with family-size farm operators and investigate the feasibility of purchasing loans at a discount rate and then converting the loan to a regular farm ownership or operating loan program. The respondent states that "nearly one-third of medium size farmers in the nation have debt to asset ratios greater than forty percent . . . there is no question for the need of massive federal assistance to provide additional security for debts of family-size farm units."

The second public interest group wrote "The debt adjustment program (DAP) announced in the October 19 regulations contains terms which will limit its effectiveness." They stated that it is unlikely that a lender will be interested in aiding a borrower if FmHA requires at least a 10 percent writeoff for those borrowers who already have or are near to having a positive cash flow unless the lender is substantially undersecured. They also wrote that the DAP should explicitly allow existing FmHA guaranteed borrowers to participate in the program and that "some mechanism for giving the borrowers a role in requesting the writeoff should be instituted."

The regular farm loan guarantee program is available to lenders with farm loans that are high risk and adequately secured but where the borrower has a positive cash flow. The DAP offers another tool to assist both farmers and lenders where there is no alternative but eventual liquidation.

Exhibit B of Subpart B of Part 1980 of the interim rule published October 19, 1984, has been revised as a result of the comments (1) to permit the lender to substitute a reduced interest rate in lieu of a writeoff; (2) to permit the lender to charge a fixed or variable interest rate; (3) to make changes for clarity and (4) permit guaranteed DAP loans to be rescheduled up to fifteen years from the date of the rescheduling action and (5) to allow a variable rate guarantee when the lender chooses to use an interest rate reduction in lieu of a writeoff.

Need For Government Action: The FmHA programs affected by this regulation change are Farm Ownership (FO) guaranteed loans and Operating (OL) guaranteed loans.

FmHA guaranteed loans are made and serviced by commercial sources such as Federal Land banks, Production Credit Associations, banks, insurance companies and savings and loan associations. FmHA may provide the lender with a guarantee not to exceed 90 percent of loss of principal and interest of a loan.

A large percentage of the nation's small- and medium-size farmers operate farms which fall within the FmHA definition of a family size farm. Eligible farmers operating not larger than family-size farms can be provided FmHA assistance through guaranteed OL and FO loan authorities. In many cases, lenders have outstanding loans with small- and medium-size farmers who do not have adequate security and/or do not have the ability to repay their loans within a reasonable period of time. FmHA can provide assistance to both lenders and their customers by use of the DAP administered in conjunction with 7 CFR Part 1903, Subpart A "Voluntary Debt Adjustment" and the guaranteed loan authorities for OL and FO loans under 7 CFR Part 1980, Subparts A and B. Lenders who wish to participate in this program must be willing to adjust their loans by permanently writing off a minimum of 10 percent of the total principal and interest outstanding on each loan which the lender wants guaranteed or by reducing the rate of interest in an amount which will provide a reduction in interest cost equal to 10 percent of the total principal and interest outstanding on each loan which the lender wants guaranteed. The amount written off or the interest rate reduction must establish a financial position which is compatible with the borrower's total debt payment ability and provide for a positive cash flow in the borrower's operating budget.

The purpose of the DAP is to provide lenders with a tool that would enable them to continue to provide credit during a workout period with loans which are now classified as substandard or worse. Without this alternative method of continuation, many lenders would have no choice but to force some of their borrowers to liquidate assets or otherwise leave agriculture. To meet the expected need for DAP, a significant amount of funds available for guaranteeing FO and OL loans will be made available for this program.

List of Subjects in 7 CFR Part 1980

Loan programs—Agriculture.

Accordingly, the interim rule published October 19, 1984 [49 FR 41223], is adopted as a final rule with the following amendments:

PART 1980—GENERAL

Subpart B—Farmer Program Loans

1. In § 1980.124, paragraph (b)(9) is revised to read as follows:

§ 1980.124 Consolidation, rescheduling, reamortizing and deferral.

* * * * *

(b) * * *

(9) The new note which exists after a consolidation or rescheduling occurs must be repaid over a period *not to exceed fifteen years* from the date of the action, unless the new note evidences a loan made solely for recreation and/or nonfarm enterprise purposes, in which case it must be repaid over a period not to exceed seven years from the date of the action.

* * * * *

2. Exhibit B to Subpart B of Part 1980 is revised to read as follows:

Exhibit B.—Debt Adjustment Program—Farmers Home Administration (FmHA) Guarantees of Loans with Accompanying Debt Adjustment by Lender

I *General:* This Exhibit provides policies and procedures for the debt adjustment program (DAP) for guaranteed operating loans (OL) described in § 1980.175 and farm ownership (FO) loans described in § 1980.180 of this subpart. All sections of Subparts A and B of Part 1980 apply except as modified by Exhibit A of this subpart and this Exhibit. The objective of the DAP is to provide lenders with a tool to enable them to continue to provide credit to operators of not larger than family farms who do not have the ability to repay their loan(s) and/or do not have adequate security for their loan(s) without debt adjustment. Borrowers, lenders and loan(s) guaranteed must meet all requirements for guaranteed OL and/or FO loans in this subpart. Loan guarantees under this Exhibit will only be available for loans which are classified as substandard or worse by the lender's supervising agency.

Lenders that participate in this program must write down existing indebtedness to the extent necessary to assure that the new guaranteed loan will show a positive cash flow each year of the loan. The write down can take either of two forms:

- An upfront write off of existing indebtedness of at least 10%.
- A reduction in the interest rate, the present value of which reduction over the term of the loan must be equal to the value of an upfront write down of existing indebtedness of at least 10%.

Both of these options must result in the same Federal risk exposure under the FmHA guarantee.

A. *Authority.* The authorizations in this Exhibit provide: (1) a significant amount of funds for guaranteeing FO and OL loans will be made available for the DAP; (2) only loans to farmers which are classified as substandard or worse loans by the lender's supervising agency will be considered for a guarantee; (3) the lender must actually write off, by permanent cancellation, a minimum of 10 percent of the total principal and interest outstanding on each loan which the lender wants guaranteed or must provide for a reduction in the interest rate, the present value of which reduction over the term of the loan must be equal to the value of an upfront write down of existing indebtedness of at least 10%. Whenever the interest rate reduction is used in lieu of a write off, the loan guarantee will be set a a level which assures that the Federal risk exposure is the same as it would be under an upfront principal and interest write off.

In addition to the required 10 percent minimum write off or interest rate reduction used in lieu of write off, the lender must also write off more principal and interest or reduce the rate of interest still more so that the borrower's operation projects a positive cash flow over the life of the loan. For the purposes of this Exhibit a cash flow projection is a listing of all anticipated cash inflows (both farm and non-farm) for each year, and all anticipated cash outflows (both farm and non-farm) including operating expense, debt repayments, family living expenditures and tax payments. For the purposes of this Exhibit a positive cash flow is one which shows that anticipated cash inflows are at least 110 percent of each year's anticipated cash outflows. The adjusted indebtedness must be adequately secured.

B. *Policy.* Private lenders now hold a substantial number of farm operating and real estate loans to operators of not larger than family size farms which are classified as substandard or worse loans. The terms, conditions and amount of these loans will have to be adjusted in order to provide for a positive cash flow projection. When lenders request FmHA guarantees for such loans, the following conditions must be met before an FmHA guarantee will be issued:

(1) The lender must permanently write off a minimum of 10 percent of the total principal and interest outstanding on each loan or must provide for a reduction in the interest rate, the present value of which reduction over the term of the loan must be equal to the value of an upfront write down of existing indebtedness of at least 10%. In addition, the lender must permanently reduce the interest rate or write off of sufficient additional principal and interest to produce a positive cash flow and to produce a financial position which is compatible with the borrower's total debt payment ability. This will be accomplished by taking a new note for the adjusted amount owing. Guarantees will only be issued on new notes reflecting the adjusted balance or new interest rate. The entire loan amount must be adequately secured.

(2) The FmHA will guarantee 90 percent of the remaining adjusted indebtedness under § 1980.20 of Subpart A of this part, whenever the lender writes off at least 10 percent.

(3) Whenever an interest rate reduction is used in lieu of a write off, the guarantee level will be set as follows:

	Principal	Federal Loan Guarantee Level	Government's Exposure
The day of loan closing:			
With a 10% write off:	$ 90,000	90%	$ 81,000
With Interest rate Reduction:	$ 100,000	81%*>	$ 81,000

*>$81,000 ÷ $100,000 = 81%

(4) Whenever an interest rate reduction is used in lieu of a write off, the percent of guarantee will be adjusted at the time of liquidation to assure that the dollar amount of the Government's loss will be equivalent to the same amount as if there had been a principal write off and a 90% guarantee has been used. Example follows:

	Principal	Federal Loan Guarantee Level	Government's Exposure
DEFAULT 1st YEAR AFTER LOAN CLOSING:			
With a 10% write off:	$ 103,500*>	90%	$ 93,150
With interest rate reduction:	$ 110,750*>	84.1%**>	$ 93,141

*>No principal paid during the 1st year.
The $13,500 unpaid interest accrued at 15% during the 1st year plus $90,000 unpaid principal = $103,500.

*>No principal paid during 1st year.
The $10,750 unpaid interest accrued at 10.75% during 1st year plus $100,000 unpaid principal = $110,750.

**>$93,150 ÷ $110,750 = 84.10%

	Principal	Federal Loan Guaranteed Level	Government's Exposure
DEFAULT 2nd YEAR AFTER LOAN CLOSING:			
With a 10% write off:	$ 88,103*>	90%	$ 79,023
*>No principal paid during the 2nd year. The $11,491 unpaid interest accrued at 15.00% during the 2nd year plus $76,612 unpaid principal = $88,103.			
With interest rate reduction:	$ 92,921*>	85.0%**>	$ 78,983
*>No principal paid during the 2nd year. The $9,019 unpaid interest accrued at 10.75% during the 2nd year plus $83,902 unpaid principal = $92,921			
**>$79,023 ÷ $92,921 = 85.04%			
DEFAULT 3rd YEAR AFTER LOAN CLOSING:			
With a 10% write off:	$ 70,397*>	90%	$ 63,357
*>No principal paid during the 3rd year. The $9,182 unpaid interest accrued at 15.00% during the 3rd year plus $61,215 unpaid principal = $70,397.			
With interest rate reduction:	$ 73,175*>	86.58%**>	$ 63,355
*>No principal paid during 3rd year. The $7,102 unpaid interest accrued at 10.75% during 3rd year plus $66,073 unpaid principal = $73,175.			
**>$63,357 ÷ $73,175 = 86.58%			
DEFAULT 4th YEAR AFTER LOAN CLOSING:			
With a 10% write off:	$ 50,035*>	90%	$ 45,032
*>No principal paid during the 4th year. The $6,526 unpaid interest accrued at 15.00% during the 4th year plus $43,509 unpaid principal = $50,035.			
With interest rate reduction:	$ 51,307*>	87.77%**>	$ 45,032
*>No principal paid during the 4th year. The $4,980 unpaid interest accrued at 10.75% during the 4th year plus $46,327 unpaid principal = $51,307			
**>$45,032 ÷ $51,307 = 87.77%			
DEFAULT 5th YEAR AFTER LOAN CLOSING:			
With a 10% write off:	$ 26,619	90%	$ 23,957
*>No principal paid during the 5th year. The $3,472 unpaid interest accrued at 15.00% during the 5th year plus $23,147 unpaid principal = $26,619.			
With interest rate reduction:	$ 27,088*>	88.44%**>	$ 23,957
*>No principal paid during the 5th year. The $26,619 unpaid interest accrued at 10.75% during the 5th year plus $24,459 unpaid principal = $27,088.			
**>$23,957 ÷ $27,088 = 88.44%			

Formula for adjusting the percent of loan guarantee upon liquidation settlement when interest rate reduction is used in lieu of write off.

$A \times B = C \div D = E$

A = Unpaid Principal plus interest, if a 10 % write off had been made.

B = 90%

C = Dollar amount of guarantee, if a 10% write off had been made.

D = Unpaid principal plus interest at time of guarantee settlement.

E = Adjusted percent guarantee at time of liquidation settlement.

This means that the dollar amount of the Government's loss if the interest rate is reduced must be the same as the Government's loss if principal and interest had been written off for the period of the loan guarantee.

(5) Whenever an interest rate reduction is used in lieu of a principal write off, the percent of guarantee will be established at the time of the loan closing under the assumption that a 90 percent loan guarantee would have been granted if the lender had chosen an equivalent principal write off. Form FmHA 449-34, "Loan Note Guarantee," will be amended to show the minimum guarantee granted on the interest rate reduction method loan. The first line under the lender's address should be "The minimum guaranteed portion of the loan is $ ——— which is ——— (——%) percent of loan principal." These changes will be dated and initialled by the lender's authorized agent.

When Form FmHA 449-36, "Assignment Guarantee Agreement," is used for loans where the interest rate is reduced in lieu of principal write off the minimum and maximum guarantee loan limits will be shown. In these cases Form FmHA 449-36 will be amended as follows: "The United States of America, acting through Farmers Home Administration (FmHA) entered into a Loan Note Guarantee (Form FmHA 449-34) with the lender applicable to such loan to guarantee the loan at a minimum of ——% at the beginning and not to exceed ——% of the amount of the principal advanced and any interest (including any loan subsidy) due thereon as provided therein. These changes will be dated and initialled by the lender's authorized agent.

Form FmHA 449-35, "Lender's Agreement," will be amended to show the minimum and maximum loan guarantee limits when interest rate reduction is used in lieu of a principal write off. Form 449-35 will be amended to read "The United States of America acting through Farmers Home Administration (FmHA) has entered into a "Loan Note Guarantee" (Form FmHA 449-34) or has issued a "Conditional Commitment for Guarantee" (Form FmHA 449-14) to enter into a Loan Note Guarantee with the lender applicable to such loan to participate in a percentage of any loss on the loan of a minimum of ——% at the beginning and not to exceed ——% of the amount of the principal advance and any interest (including any loan subsidy) thereon." Section I. under *THE PARTIES AGREE:* will be amended to read "The maximum loss covered under the Loan Note Guarantee will be a minimum of ——% at the beginning and not to exceed ——% of the principal and accrued interest including any loan subsidy on the above indebtedness." These changes will be dated and initialled by the lender's authorized agent.

(6) A guarantee will not be issued unless the farming operation shows a projected positive cash flow and the borrower is determined to be eligible for a guaranteed OL or FO loan under this subpart.

(7) Lenders who wish to participate in this debt adjustment program will be encouraged to apply for Approved Lender Program (ALP) status under Exhibit A of this subpart to expedite processing of requests for a guarantee. However, guarantees are not limited to lenders with ALP status.

II *Processing Guaranteed OL and/or FO Loans With Debt Adjustments.* FmHA personnel responsible for accepting, processing and approving or denying requests for Loan Note Guarantees will follow the policies, responsibilities and procedures in Part 1903, Subpart A, "Voluntary Debt Adjustment" (except § 1903.9(a)). Lenders applying for guarantees will be expected to enter into any necessary debt adjustment negotiations with the borrower's other creditors who have provided supplier or dealer type open accounts and/or secured credit.

A. Guarantees will not be issued under this Exhibit to lenders that do not comply with Paragraph I B (1) of this Exhibit. The amount which will be saved by the borrower must be permanently cancelled by the lender and no attempt must ever be made to collect that portion of the debt. Form FmHA 403-1, "Debt Adjustment," will be executed by the borrower and the lender. Lenders will provide evidence in the form of a written certification (see Attachment 1 to this

Exhibit) for the FmHA file which attests to the amount of each loan, amount of write off or interest rate reduction and amount of the new balance upon which the guarantee is requested.

B. Lenders must abide by limitations on loan purposes, loan limitations, interest rates, terms and security requirements as set forth for OL and FO loans in §§ 1980.175 and 1980.180 of this subpart. The interest rate to be paid by the borrower to the lender may be a fixed or variable rate agreed upon by the borrower and the lender. The rate can never exceed the rate the lender charges its best farm customers on loans for similar purposes and terms (see § 1980.175 (e) and § 1980.180 (f) of this Subpart). If a variable rate is used, it cannot change more often than monthly. If a variable interest rate is used, the spread between that rate and the interest rate charged to its best farm customers will remain constant throughout the period of the loan guarantee. This constant factor will be identified at the time of loan closing as a condition of loan approval.

C. All requests for guaranteed OL and FO loans will be processed under Part 1980 Subparts A and B, including Exhibit A of this subpart, except as modified by this Exhibit B for debt adjustment. Except as modified by Exhibit A to this subpart, FmHA personnel responsible for processing a request for guarantee under this Exhibit B will review each request for guarantee to determine that: (1) values placed on assets by the lender are consistent with market values for the area; (2) the borrower has suitable tenure on any essential leased land, facilities or equipment; (3) operating cost(s), yields, production and prices used in the farm budget are realistic for the farm and the operator; and (4) all conditions required in paragraph I B (1) and (3) of this Exhibit are met. Form FmHA 449-23, "Guaranteed Loan Evaluation", must be completed and must contain these four determinations. This form will be placed in the case file.

D. One lender may receive both a guaranteed OL and FO with a Loan Note Guarantee for each note. Any other loans made to the same borrower for which the same lender requests a guarantee will be processed under Subparts A and B of Part 1980 except as modified by Exhibit A of this subpart.

E. With the State Director's prior consent, the lender may extend the repayment term on any loan(s) previously guaranteed under this subpart by writing a new note which has an extended repayment term. The State Director's consent will be given provided:

(1) The lender provides FmHA with documentation to show that the borrower meets the eligibility and security requirements for which the initial loan was guaranteed; the borrower is cooperating in servicing the account and is maintaining the security; and such action enables the borrower to continue farming.

(2) Any holder(s) agrees in writing to the extension of the term.

(3) The new note will not capitalize accrued interest and will not increase the amount of principal which the borrower would have been required to pay, the interest rate, or the percent of loan guarantee.

(4) A new note evidencing a loan made for farm operating purposes must be repaid within fifteen years from the date of the original note and new loans made for real estate purposes must be repaid within 40 years from the date of the original note.

(5) The new note will describe the original (guaranteed) note and will state that the indebtedness evidenced by such note is *not* satisfied. The original note will be retained by the lender for identification purposes.

(6) Additional security instruments will be required if needed to maintain lien priority or to protect the interests of the lender and FmHA.

(7) The State Director will review all documents when presented by the lender to assure all requirements are met and will contact the Regional OGC for assistance, if necessary.

(8) The State Director must make sure the following addendum is attached to the original and all copies of Form FmHA 449-34, "Loan Note Guarantee," and any Form FmHA 449-36, "Assignment Guarantee Agreement":

Based on information provided by the lender, FmHA agrees to allow this borrower's repayment term to be extended. The new term is set out in a note dated ————. The Loan Note Guarantee issued on ————, 19—, remains in effect. This guarantee remains subject to the Lender's Agreement and the provisions of 7 CFR, Part 1980. FmHA's authority to consent to this extension of the repayment term is found in 7 CFR, Part 1980, Subpart B, Exhibit B.

____

Date

____

State Director

F. The guarantee fee(s) are in § 1980.21 of Subpart A (1% initial fee, 1% substitution fee) and are paid as in § 1980.61(f) of Subpart A.

G. Applications are accepted and processed under Subparts A and B of Part 1980 except as modified by Exhibit A of this subpart.

H. The Types of Assistance Codes for DAP guaranteed loans are:

FO-33
OL-49
TO: County Supervisor, FmHA

____

____

SUBJECT: Certification of Write Off of Indebtedness or Write Down of Interest Rate.

Borrower's Name: ______________________

This lending institution certifies that:

1. The total upaid principal and interest balance on the original loans was $———. The new loan balance of $——— is the amount requested for a guarantee.

2. The interest rate charged on the original loan balance was ——%. The (fixed/variable) interest rate to be charged on the new loan balance to the above-mentioned borrower is ——%. This rate will never exceed the corresponding rate charged to our best farm customers (see 7 CFR § 1980.175 (e) and § 1980.180 (f).

If a variable rate is used, the interest rate charged cannot change more often than monthly and the spread will remain ——% below the interest rate charged our best farm customers as defined in FmHA regulations for the period of the guarantee.

3. The amount which this borrower will save due to the write off or the interest rate reduction is permanently cancelled and no attempt will ever be made to collect that portion of the debt.

____
(Name of Lender)

____
Lender's IRS I.D. No.

By: ______________________________
TITLE: ______________________________
DATE: ______________________________

(7 U.S.C. 1989; 7 CFR 2.23; 7 CFR 2.70)

Dated: February 13, 1985.

F.W. Naylor, Jr.,
Under Secretary, Small Community and Rural Development.

[FR Doc. 85-4066 Filed 2-14-85; 9:09 am]

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QUALIFICATION OF FARMERS

Senator McClure. I am not going to spend a lot of the committee's time going over some of the things that have been gone into, but I am concerned that as of last week, nationwide, there were only 75 farmers who have been able to qualify. I know that there is a startup period and that will balloon very quickly, but that is the information that I had as of last Friday.

As a matter of fact, in the State of Idaho, if I understand correctly, there is only one bank that has even requested to be approved, as of last Friday. So something is breaking down somewhere, and I think we may have touched on some of the speculation as to why.

There is another direct question that I would like to ask Mr. Wilkinson. I understand that what you are saying is that the Farm Credit Council and the Farm Credit Administration both are saying that the financial problems of the Farm Credit System must have Federal assistance, is that not correct?

Governor Wilkinson. No, sir; I did not say that.

Senator McClure. All right. The Farm Credit Council has said that, has it not?

Governor Wilkinson. No; I don't think so. Not in the way of financial assistance, Senator McClure. I am not able to speak for the Farm Credit Council, since that is their own trade association.

I would like to clarify as far as the Farm Credit Administration is concerned.

Senator McClure. All right.

Governor Wilkinson. We have not come to you asking for Federal financial assistance. We are asking for your understanding of the severity of the agricultural credit situation, and you know that situation in Idaho. It is unfortunately one of the States in which the Spokane FICB has had to liquidate your Southern Idaho Production Credit Association. But that is being covered by the Spokane Bank, and the Spokane Bank is receiving assistance from the other 36 banks within the Farm Credit System.

No Government money is being requested by the Farm Credit System.

Senator McClure. Perhaps the basis of my dilemma is that at least some elements within the Farm Credit Council are saying, and indeed others are saying, that the Federal system is in need of Federal assistance, if not Federal financial assistance. Then I see an advertisement placed by the Farm Credit System that says, "Everything is fine. Don't worry about us. We have problems, but we are handling them."

I just wonder if that is part of the problem? I assume you are familiar with that.

Governor Wilkinson. I am familiar with that.

Senator McClure. The president of the Farm Credit Banks of Omaha—and it was published, I believe, in Des Moines, which we are led to believe here is the heart of discontent and problems in this country.

Governor Wilkinson. Yes, sir.

Senator McClure. And isn't there an advertisement being purchased and placed by the Farm Credit System saying that only 7 percent of the borrowers, 7 out of 100 are in trouble? There may be more that will be in trouble.

Incidentally, that is very close to the experience that I have in Idaho. There have been 6.7 percent that by one definition are in trouble.

The question is how about that next larger segment that we are afraid of?

Back to the question of the ads, are you telling us that the Farm Credit System doesn't have any difficulties?

FINANCIAL STRESS WITHIN SYSTEM

Governor Wilkinson. I am sorry that I did not have the privilege of presenting to you my testimony earlier, Senator. I did indicate that the Farm Credit System is facing more financial stress within its own system than it ever has since the Great Depression, especially your district, the Spokane district, as well as the Omaha district, and you have made reference to both of those.

I indicated that two of those banks are having to ask the other parts of the Farm Credit System for assistance to absorb some of the losses which they have faced in serving the farmers. Now, that particular reference that you have from Omaha is an indication that the system is still sound. It still prudently has been setting aside, for many years, reserves for losses.

The issue is that those reserves may be in other parts of the system and not available to the Spokane or the Omaha district institutions because of the structure of the system itself. What is now being done is that the system, by their own financial agreement, approved by us as a regulator, the Farm Credit Administration, is indicating that the entire system's financial resources will be used to maintain the integrity of all of its institutions.

But we are also saying that this is not the time to go to the Government asking for funding. The last of the funds were paid back in 1968. Any effort now, in our opinion, would send an unnecessary signal to the investment community that, in turn, would raise the cost of funding.

The sale of Farm Credit System securities still is moving very effectively in the money market. The rates are very competitive, Senator McClure.

Senator McClure. Mr. Wilkinson, assume that the $300 million is not approved and is not given to the 12th district, what then?

Governor Wilkinson. That then would mean that the Farm Credit Administration, as the regulator, would have to make a decision as to whether the time had come to actually merge that district with another district, if the system itself would not provide the financial assistance.

The other alternative would be to liquidate that bank and allow the production credit association and the farmers to be served by another of the Farm Credit System institutions. The farmers will be served. That is the law.

Senator McClure. I have some other questions which I will submit for the record dealing with the problems of the 12th district and the general turnaround, the question of why we have—why we don't see more concrete results.

I do believe that there are startup lags that are inevitable.

APPROVED LENDERS

Mr. Naylor, you stated in a directive that if the bank is an approved lender—as I indicated before, only one bank in Idaho has even asked for that status as of last Friday—loan applications will have a 5-day turnaround time in the FmHA office. Many State directors, I am told, do not feel that the directive is specific in this regard, and some banks are experiencing a 2- to 3-week turnaround time, not the 5 days.

What do you expect of the State offices which deal with approved lenders in terms of turnaround time?

Mr. Naylor. Senator, the instruction is very plain, they are to process the applications in 5 days.

Senator McClure. What happens if they don't?

Mr. Naylor. Then we will have to take appropriate internal disciplinary action on those individuals who can't follow that directive.

Senator McClure. Do we have an answer for the dilemma that we have with banks hanging back, waiting to see if a better deal is going to be offered?

I have no question at all that if I were a bank manager, and I saw Congress talking about different kinds of programs that might favor the banks even more than this one—even though that is hard to imagine—that they might withhold participation until it is clear that there will be nothing else.

The other side of that, however, is again, the fact that planting season is upon us and if, indeed, banks aren't participating, and if banks don't even come and ask to be an approved lender, are we just waiting for public opinion to put pressure on them? Are they really going to act, and if they do act, are we sure that we can act in a reasonable length of time to turn those loan applications around?

Again there is this question of the banks saying, "Hey, you are marginal. Go get the Government assistance."

He goes over to the Government window and the guy says, "Not for you, Buddy, go back to that other window."

Mr. NAYLOR. Senator, you have touched on, perhaps, our most difficult problem in knowing exactly how that is going to develop. The banks, in private discussions with the Secretary and myself in the last 10 days to 2 weeks, have indicated that they indeed want to see what Congress might do. We have come to the conclusion that it is beyond the time in which they could take any real action for this lending season. They are going to work with us and do everything in their power to make the program work. In the Grain Belt area of the country, where the pressure has been most evident, the banking associations and the banks themselves are moving very rapidly.

There are some areas, perhaps including yours, in which the banks continue to hold back. The result of that will be one of two things. Either we will provide the lending through our direct program, if that becomes absolutely necessary; or indeed public pressure from public officials such as yourself and us will persuade the banks that they can and should exercise their responsibility to stay with their borrowers.

Senator McCLURE. If you hold out the prospect that you will make direct loans, aren't the banks going to leave the marginal borrower to your devices and not step forward at all?

Mr. NAYLOR. I think that is a very real risk and we have to make it clear to the banks that we will not take on loans that they have the capability, with guarantees, to handle. They are going to have to retain that responsibility.

Senator McCLURE. If the banks say, "We can't," then we are in that catch-22, or the farmer is in a catch-22.

Mr. NAYLOR. I do not want to see the farmer in that situation.

Senator McCLURE. Neither do I. But I don't want to see us shoulder all the debt, either.

Mr. NAYLOR. No, sir.

Senator McCLURE. I understand the dilemma that faces you. I also understand that poor farmer out there. He has been getting credit for a long time. He has been getting squeezed. He is getting squeezed harder.

He goes back to his bank. His bank says, "Nope, you go over to the Federal Government this year."

He goes over to the Federal Government. He says, "Nope, you don't qualify here. So back to your bank."

The bank says, "Sorry, you can't get a loan here. Go back to the Federal Government."

In the meantime the calendar keeps running.

Thank you, Mr. Chairman. I will submit some further questions for the record.

Senator COCHRAN. Thank you very much. Mr. Secretary, we hope those answers will be prepared and submitted to the committee within a reasonable time, at your earliest convenience.

Senator Sasser.

[CLERK'S NOTE.—All questions and answers submitted in writing appear at the conclusion of today's testimony.]

Senator SASSER. Thank you, Mr. Chairman. I think I am living proof that all good things come to those who are patient.

EFFECTIVENESS OF FMHA

Mr. Naylor, I have listened with great interest to you this morning, and listened to the questions that have been propounded to you, and read and reread your statement, and I will tell you, quite frankly, that I get the impression that you may be here in the 50th year of the Farmers Home Administration history, but presiding over the ultimate demise and dissolution of this agency, certainly presiding over a very serious diminution of its effectiveness in the agricultural economy.

I note from the testimony of Mr. Wilkinson here that we have got, by his testimony, something like 10 percent of the borrowers, as I wrote it down, who can't receive the loans that they need for spring planting. Then we look at the Farmers Home Program, the one that was announced with great fanfare in the fall of last year, of loan deferrals.

In my State there were 3,192 applicants. As of the end of January, I think that 15 had qualified, according to the statistics that I got from the State of Tennessee, with regard to the new expedited approval measures. I haven't gotten any new findings on that, but if only 61 have qualified nationwide, I doubt very seriously that there was a significant number to qualify from Tennessee.

One of the—it appears to me on the face here—greatest farm economic crises that we have experienced, certainly since the days of the 1930's, is that we see emanating from the Farmers Home Administration a policy of retreat and retrenchment and pushing the farmer off on private lenders, all in the name of moving in a direction of a market economy, all in the name of reducing the budget deficit, with the idea in mind that funds spent in the agricultural economy are budget busters, and funds spent in the defense area will show that money just doesn't count.

REDUCTION OF STAFF

I note here that there is a reduction of 3,650 in the staff-year ceiling, you are indicating. What do you mean by that? You are talking about your staff reduction, on page 8 of your statement.

Mr. NAYLOR. That will reflect the manpower resources necessary to sustain the program responsibilities outlined in the budget proposal.

Senator SASSER. Is that a reduction in staff-years or a reduction in actual personnel?

Mr. NAYLOR. It is staff-years but it would reflect essentially permanent personnel.

Senator SASSER. Do you want to add something to that, Mr. Calhoun?

Mr. Calhoun. No, sir.

Senator SASSER. I thought you were indicating that you did.

What would that translate out to per person in personnel?

Mr. NAYLOR. Approximately the same number. We will actually have to make an assessment of where those changes might be, and which parts of the country, and which offices would be involved.

Senator SASSER. You know, Mr. Naylor, one of the chief complaints that I get about the Farmers Home Administration down my way is the enormous backlog of work and loans and loan applications that many of your field people have, and many, many, farmers and many Farmers Home Administration personnel lamenting their work overload and saying that they need additional help in processing applications.

Yet, we are going to move into a reduction here of about 3,500 people. Will those reductions take place out in the States? Or will they take place here in Washington? Where will they take place?

Mr. NAYLOR. We have not proposed the precise allocations. They would obviously take place at all levels of our operation. However, Senator, I point out that there is a substantially different program than the one we are currently operating that would be anticipated with that change. It would change the workload on our personnel in the field.

Senator SASSER. If you have—if nobody can qualify for the loans here——

Mr. NAYLOR. We have plenty of people qualifying for loans, which is indicated by the record level of loans that we have made already this year.

Senator SASSER. I was just looking at these statistics that I cited a moment ago and some statistics that I read in the paper here a day or two ago, that 61 had qualified since the new procedures were announced some 2 or 3 weeks ago. Wouldn't this be about the busiest time of the year for the Farmers Home Administration, when the farmers come in to try to get funding for spring planting?

RECORD LEVEL FOR OPERATING LOAN PROGRAM

Mr. NAYLOR. As I indicated earlier in my testimony, the Farmers Home Administration portion of the debt program has been very successful. We have completed 25,000 debt restructuring actions nationally within Farmers Home so far this year, with 4 to 6 weeks left to go. We have already committed a record number of operating loans for this year in the Farmers Home Administration. The 61 number which we have been discussing, reflects the participation by the commercial banks in a Debt Adjustment Program for their marginal and substandard loans. They have been holding back participation in this program but they now indicate that they use it in many parts of the country. We expect to see them do so.

NET LOAN LOSSES

Senator SASSER. Mr. Wilkinson, if I may shift my focus for just a moment and pose some questions here to you. You are indicating that net loan losses in 1984 was $407 million. Is that correct?

Governor WILKINSON. Yes, sir.

Senator SASSER. Up from $226 million in 1983.

Governor WILKINSON. Yes, sir.

Senator SASSER. Almost a doubling?

Governor WILKINSON. Yes.

Senator SASSER. You are indicating that $9.3 billion were classified as nonperforming. Would that translate out to something like 10 or 12 percent of the loans supervised by the Farm Credit System are nonperforming?

Governor WILKINSON. It would be in about that category. I had earlier indicated that about 8 to 10 percent were in the serious area of difficulty and would not receive credit this spring.

Senator SASSER. We had a meeting, some of us, the other day—I don't know whether the chairman was in that meeting or not—but the banking supervisor or superintendent of a Midwestern State was telling us that they had been doing a review in his State of farm banks—that is, banks where 25 percent or more of their loans were made to farmers.

They were halfway, 50 percent, through with the review in this particular State, and found well over 100 farm banks that were in difficulty. In your experience, is that typical of what is happening in the Midwest?

Governor WILKINSON. I cannot speak for the figure of 100 banks, because I do not know which State this banking commissioner may have been representing. But what I will say, Senator Sasser, is that the agricultural commercial banking sector, and you have designated that properly, with 25 percent of their loans in agriculture, are facing this same degree of difficulty as that which I have reported for the private Farm Credit System.

There are severe pockets of stress across the country. When you find a production credit association facing difficulty, you will find a commercial bank also facing that same difficulty, which, frankly, exacerbates the overall problem in a rural community, when the two major lending institutions both face difficulty at the same time.

Although I cannot speak for the rural banking industry, I can only share with you that they are facing difficulty in a major status right now.

Senator SASSER. Are these rural banks or farm banks in any position, or in any financial position, or in any frame of mind at this point to start picking up additional marginal farm loans?

Governor WILKINSON. I hesitate speaking for the commercial banks because they are not under our supervision.

Senator SASSER. Can you give us your general observation on it?

Governor WILKINSON. These commercial banks in many cases are at a stage where they have utilized much of the reserves which they have accumulated for losses. They are not locked into serving agriculture in a way that the production credit association is mandated as serving it day in and day out.

Because commercial banks are accountable to their stockholders as a profit organization, they will look elsewhere during times of stress. Perhaps they will be tempted to diminish some of their agricultural portfolio.

However, they are part of that rural community. I am sure that many of them do have a feeling of obligation and responsibility to that community and will stay with some of their regular and sound customers as long as they possibly can.

AGRICULTURAL GUARANTEE LENDING

Senator SASSER. I suppose my question really is this, Mr. Chairman: We see Mr. Naylor telling us that the Farmers Home Administration wishes to send farmers into the private credit system, and the private bankers. And we see a private credit system here that is ailing, in trouble, and is not inclined to pick up additional agricultural loans, from what I am hearing.

My question is: Where do these people go? Where do they go, Mr. Naylor? Are we just going to sit by and write off 10 to 15 to 20 percent of the farmers in this country this year, next year? Isn't that really the bottom line? Is that where it is heading?

Mr. NAYLOR. No; I don't agree with you at all that that is going to be the case. I would be delighted to spend time with you and other members of the committee to give you a very detailed description of what we would expect to do over the next several years to protect our borrowers and ensure that they continue to receive credit where appropriate.

STRENGTH OF RURAL BANKING INDUSTRY

I think it is also important to respond, as Governor Wilkinson has, to your question. There is no doubt that in some parts of the country, most notably the Grain Belt, many of our agricultural banks are feeling some stress and have not bottomed out. I think it is also important to remember that as a group they do have adequate lending funds available. They have adequate earnings and adequate capital. They have the capacity to continue, in most cases, to serve their communities. You made reference to a State banking commissioner. The Federal Deposit Insurance System's rating system takes a very much different view of his State and the degree of problem which that particular area is undergoing and their capacity to serve their communities. One indicator is the continued payment of dividend levels by the rural banks, although they have seen a decline in earnings. In much of this area that is under particular stress, their dividend rates have not declined. In fact, in one State in this area, they have actually increased.

There is a substantial amount of strength left in the rural banking community and a substantial capacity to respond to the needs of their communities. While there has been some hesitation up to this point in the season, you will find those banks responding to their communities and doing what they should do in providing support for the farmers and the businesses in the community before this lending season is over.

Senator SASSER. Well, we shall see, Mr. Naylor. I certainly hope that you are correct. I am not sure I share your optimism, but I fervently hope that you are correct and that I am not.

Thank you, Mr. Chairman.

Senator COCHRAN. Thank you, Senator. I think we can all see from the number of Senators who attended this committee this morning the level of interest that we have as a committee in this overall problem of farm credit and the problems that are facing the Farmers Home Administration.

I have some questions that I am going to submit for the record, because we have consumed a lot of time this morning.

I do, though, before we adjourn, want to ask a few questions. Just a general observation, if I can, from the panel of witnesses.

CONGRESSIONAL ACTION ON BUDGET RESOLUTION

A lot of the funding levels from these programs will be determined, I suppose, by the action of the Congress in determining a budget resolution. We haven't formally, at this time, as a Congress, responded to the President's overall budget request. We are at work, as everybody knows, in trying to come to terms with a budget resolution.

So a lot of these programs, like rural water and sewer systems, and rural housing and development, generally, are going to be affected by the decision that we make on a budget resolution.

But let me just say that I am concerned that if we turn our backs on the rural part of the country by terminating programs that are targeted for reduction or elimination in this budget request, I think we are going to make a serious error in terms of national policy.

When I first ran for Congress as a candidate in 1972, I remember deciding that one of the things that I wanted to stress in my campaign was support for the recently passed Rural Development Act. A lot of the programs that we are discussing in the budget before us were authorized by that Rural Development Act.

I think that they were important programs to initiate at that time. I think they are still important. I don't think that all of the housing or water or development needs have been met in rural America. I think there are a lot of unmet needs.

I know that in my State, even though we have made great strides toward development and improving the standard of living for a lot of people, there are still a lot of things that need to be done. In my judgment, there has to be a minimum standard of quality of life that this

Government supports. That ought to be extended into the rural areas of the country.

So I don't look with favor on the substantial and sharp reductions that are being discussed or proposed by the Administration in this area of rural housing and rural development. We have an Office of Rural Development Policy that is funded every year. I don't know why we are going to have that if all of these reductions are approved.

As one Senator observed, maybe we can't even look forward to a Farmers Home Administration in the future if all of these changes in loan programs are made as requested by the Administration. I don't know what we will do.

I am worried about the direction that is being presented and the plan—the strategy for the future—that is being presented to this committee in the form of a budget request. I think you can put me down as leaning against it.

AGRICULTURAL CONSERVATION CORPORATION

In connection with the farm credit situation, I have been told that one proposal that is being circulated is for an Agricultural Conservation Corporation to be established. The purpose would be to stabilize farm asset values and provide for the conservation of fragile land resources.

What is your reaction to that? I would like to hear both Governor Wilkinson's reaction and Secretary Naylor's reaction.

Is there a value for such a corporation? Is there a need for that? Would there be any benefits? What about the cost to the Government?

Governor WILKINSON. I will attempt to respond first, Senator Cochran. A few weeks ago, the Federal Farm Credit Board, in evaluating the overall credit situation and receiving reports from us regarding the financial strain upon the system, did include in an overall comprehensive resolution, the concept of exploring some type of mechanism which would acquire from all of the commercial lending institutions, not just the Farm Credit institutions, but the commercial banks as well, those loans which are being categorized as being nonperforming, and putting them into some kind of a corporation outside of the Farm Credit System or the Farm Credit Administration, perhaps quasi-government, where they could be managed and administered in an appropriate manner, liquidating those necessary, and working out those which can be workable.

The objective is to try to allow the commercial lending institutions, having discounted those loans and having sold them then to this corporation, to proceed and service as effectively as possible the ongoing commercial business in which they are involved.

The Farm Credit Council, which is the trade association of the system, has been attempting to develop a specific proposal to submit to the Congress, which at this stage is not totally refined. There are various versions. One would have a front-end funding by the Federal Government. Others would have a loan type of arrangement, lending type of an arrangement, with the expectation that those funds would be paid back as the loans are effectively managed. This is the status as of today.

There will be further reporting by the Farm Credit Council as soon as this afternoon before the House Agricultural Subcommittee on Credit, regarding that specific proposal.

Senator COCHRAN. Thank you.

Mr. Secretary.

Mr. NAYLOR. Senator, we are aware that the Farm Credit Council and some of the commercial banks through Iowa State have been looking at various forms of a proposal along these lines. We have not reviewed any of those proposals because, I think as the Governor has indicated, they are still in the development stage.

We have responded to queries that we could not support and would oppose any proposal which involved Federal funding of such operations.

We understand there are several similar types of proposals within the private sector currently underway. We, of course, will respond to and review specific proposals as they are presented to us.

We understand some of the technical considerations that have led banks to look at this as an option and we will review those if they become legislative actions.

Senator COCHRAN. Senator Stennis has a question that he wanted to submit in writing. I am going to ask that that be included in the record.

[CLERK'S NOTE.—All questions and answers submitted in writing appear at the conclusion of today's testimony.]

WATER AND WASTE GRANT ELIGIBILITY

I want to let you know of my personal concern about the subject which was also touched on by Senator Bumpers earlier. That is the situation that affects basically four States in the water and waste disposal problem. Mississippi, Alabama, Arkansas, and Missouri, I think are the four States.

It has to do with the regulations that have been promulgated by the Department about eligibility for grants in these programs. As a practical matter, our States are being harmed in a discriminatory fashion by these regulations.

I have been told by your offices that new regulations are being promulgated to take care of this situation. I just simply acknowledge that I have been told that by you, and I thank you for your cooperation in looking into this specific problem that we have in this area.

I don't think we need legislation, although I am cosponsoring Senator Bumpers' bill, which would provide a legislative remedy. I don't think it is going to be necessary if these new regulations meet the problem.

In another area, Senator Max Baucus has written me concerning a situation in his State of Montana, even though he is not a member of this committee. I appreciate his bringing this matter to my committee. It involves an article written in the Billings Gazette. I am going to insert it in the record of this hearing, with his request that the Farmers

Home Administration have a look at the statements in the article and make a response to this. We will provide you with a copy of the article as well, and we would appreciate it if you could respond to the article for the committee.

SUBMITTED QUESTIONS

I have a few other questions which I am going to submit in writing. I hope you will be able to respond in a timely fashion.

Thank you for being here. Thank you for cooperating with the committee.

[The following questions were not asked at the hearing but were submitted for response for the record:]

FARMERS HOME ADMINISTRATION

QUESTIONS SUBMITTED BY SENATOR COCHRAN

CREDIT AND MANAGEMENT GUIDANCE

Question: One part of the President's farm credit initiatives announced last September was a plan to provide credit and management assistance to farmers and lenders. How is this program going? How many have participated?

Answer: As of March 21, 1985, 490 financial and farm management specialists were under contract to assist farm borrowers. With this response, we feel that the program is meeting the needs of the farmers and lenders requesting assistance.

Question: How much money has been spent on this?

Answer: At this time, we do not have a dollar amount spent on the program because each farm management specialist works under a maximum contract for $10,000, but is paid only for the work that is actually done.

INSURED OPERATING LOANS

Question: For the past two or three years, there has been an insufficient amount of insured operating loan funds available for the entire fiscal year. I am told that we are again faced with this situation — we are at the peak of the farm loan season and running out of insured operating loan funds. Each year we have been assured at our hearing that ample funds would be available, and yet each year we have had to provide supplemental funding. What is the current status of the insured operating loan program?

Answer: All currently available operating loan funds for fiscal year 1985 have been allocated to the States to handle loan requests. The Administration is committed to make sufficient funds available under the Secretary's interchange authority.

Question: How does this compare to this time last year, as far as the level of loan requests is concerned?

Answer: On March 26, 1984, 31,661 insured operating loans totaling $1.1 million had been obligated. As of the same date this year, 35,645 operating loans totaling $1.7 million had been obligated.

Question: Will there be a sufficient amount of funds to provide for the loan applications for the remainder of the fiscal year?

Answer: Yes, there will be adequate operating loan funds for the remainder of the fiscal year.

Question: Do you have the authority to transfer guaranteed loan funds to the insured operating loan account?

Answer: Yes, the Secretary's interchange authority provides us with authority to take such a step to deal with extraordinary emergencies.

Question: Do you plan to submit a supplemental appropriations request or do you have an alternate plan in case a supplemental appropriations bill is not passed by the time you run out of money?

Answer: Unless there are unforseen circumstances, we do not plan to submit a supplemental appropriations request. The pooling of funds and the use of the Secretary's interchange authority will provide adequate operating loan funding for viable farming operations.

Question: Do you plan to transfer funds from other accounts; if so, please identify the account and the amount you would transfer. Since you no longer can transfer from the housing accounts, will you be able to come up with sufficient funding?

Answer: At this time, the Secretary's interchange authority has been used to transfer $300 million to the insured operating loan program from the emergency disaster loan program. This transfer provides sufficient funding for the operating loan program demand as of this time. We will continue to monitor the situation to assure that sufficient loan funds are available.

Question: Do you have authority to transfer funds from emergency disaster program, which are appropriated as "such sums as may be necessary" for natural disasters?

Answer: The Secretary's interchange authority provides the authority to deal with extraordinary emergencies which permits the transfer of funds from the emergency disaster program.

Question: With such a rapid obligation rate of insured loans, and with such a sluggish obligation rate in guaranteed loans, how can you realistically propose for fiscal year 1986 an operating loan program of only $400 million in insured loans and $3.0 billion in guaranteed loans?

Answer: Under existing authorities, the Administration plans to use fiscal year 1986 to start the transition period for phasing out the insured operating loan program and phasing in the guaranteed operating loan program. With the emphasis on the Approved Lender Program and other incentives to lenders, obligations for guaranteed loans continue to increase. The administration intends to limit the growth in direct Federal outlays and reduce dependence on the Federal government as a supplier of credit.

GUARANTEED OPERATING LOANS

Question: It was reported that by mid-March, only 61 guaranteed operating loans had been made totaling $8.4 million. It had earlier been reported that you had obligated a considerable amount more than that. Why was there such a discrepancy in the reported figures?

Answer: From October 1, 1984 through March 26, 1985, our records indicate 1,195 regular and debt adjustment program guaranteed operating loans were obligated for a total of $136.4 million.

Question: How much do you anticipate will be obligated in the guarantee program this fiscal year, both for the regular program and for the "debt adjustment program?" Will the $650 million get us through fiscal year 1985?

Answer: Although we cannot accurately project the final loan levels, we are doing everything we can to see that these programs are meeting the needs for operating credit. As of this time, we feel that the $650 million is a sufficient funding level for fiscal year 1985.

Question: If banks are just now starting to process loan applications, and since FmHA will not process a loan unless a bank has turned the borrower down, is it not conceivable that this would cause a further drain on the insured loan account?

Answer: It is our understanding that most of the loan processing by banks and Production Credit Associations has already been completed. Most lenders start processing loans in December, with the majority of the cash flow projections completed during the January through March period. There could be a further need for FmHA insured loans if a larger number of farmers than usual have not completed cash flow projections with their bankers in the time frame normally expected.

Question: In fiscal year 1986, the Administration is proposing to implement a five percent origination fee on all guaranteed loans. Won't this create an extremely high effective interest rate, especially for 1-year operating loans?

Answer: The proposed origination fee would be a one time fee charged to the lender and would be non-refundable. The fee of up to five percent would be used to offset administrative costs and losses.

Question: How much of the guaranteed operating loan funds has been obligated this fiscal year?

Answer: As of March 26, 1985, 1,117 guaranteed operating loans totaling $136.4 million had been obligated.

Question: How much of that is associated with the President's debt adjustment program, and how much is for new guarantees under the regular guaranteed operating loan program?

Answer: As of March 20, 1985, 20 guaranteed loans totaling $2.3 million under the debt adjustment program and 898 regular guaranteed loans totaling $115.7 million had been obligated.

Question: Why did the bankers not start requesting loan guarantees until the last couple of weeks?

Answer: Historically, bankers would rather make direct loans than guaranteed loans because they felt there was too much red tape involved in obtaining the guaranteed loans. Chain banks normally have the necessary resources within their organizational structure to provide the necessary funding for any loan request they might receive. Therefore, they have shown little interest in the guaranteed program. Regarding FmHA guarantees involving the debt adjustment program, banks were not willing to accept the ten percent write-off of outstanding principal and/or interest originally proposed as it was too costly for them. The requirement was subsequently amended to allow either a write-off of debt or reduction in the interest rate equivalent to at least a ten percent debt write-off.

Question: One good year will not bring the agriculture sector out of its rut. It will take several good years. The President's debt set-aside program is designed to help farmers until those good years have been realized. However, some farmers, when their 5-year set-aside is facing them once again, will be in the same shape they are in now. Do you think that some of these farmers will, if they have one good year, spend the excess on items other than debt retirement, and therefore, be in no better shape, or will be in worse shape than they are now?

Answer: The intended effect of the special debt set-aside program is to provide emergency servicing action to assist financially distressed FmHA borrowers. This program will not solve all of FmHA's borrowers' financial problems, nor will it allow all FmHA borrowers to stay in farming. The set-aside program is, however, expected to assist most FmHA borrowers who are experiencing severe financial difficulties which threaten their ability to continue their farming operations. For some FmHA borrowers, the debt set-aside program will simply give them more time to develop plans for an orderly liquidation. A few farmers may spend their income for items other than debt retirement or planned expenses. In such cases we will terminate the set-aside and service the account as appropriate.

LOAN PROCESSING

Question: There always seem to be complaints about the amount of time it takes to process a FmHA loan. Some say that the reason is understaffing and some say the reason is that the borrowers wait too long to submit an application. What factors, other than understaffing, contribute to a long processing time?

Answer: The amount of time for processing farmer program loans is determined by a number of factors, including submitting the application and necessary information on a timely basis. Many of the farmer program loans are secured by a junior lien on real estate, subject to other mortgages or security instruments. Delays in obtaining proper title searches and reaching agreements with other mortgage holders is a major problem contributing to the delay in processing farmer program loans.

Question: Please explain, briefly, the approved lender program and how it reduces processing time. I understand that Farm Credit System Institutions have recently been approved for this program.

Answer: The Approved Lender Program is designed to streamline the processing of guaranteed loans with banks that have shown a strong background and experience in agricultural lending. Each Approved Lender executes one master "Lender's Agreement" rather than one for each loan. FmHA county supervisors are required to respond to all ALP lender requests for a guaranteed loan request within two weeks. On March 22, 1985, the "Final Rule," for the ALP program was published in the Federal Register. The Final Rule will make it easier for Farm Credit System members, individual members, individuals, and associations to enter the ALP.

Question: Several USDA agencies have made staff available to FmHA to assist with timely processing of applications. What agencies are involved, and what kind of expertise can they offer? To what extent has this help been utilized?

Answer: On February 4, 1985, FmHA entered into an agreement with the Agricultural Stabilization and Conservation Service, on February 20, 1985, with the Extension Service, and on March 1, 1985, with the Soil Conservation Service. These agreements provide for the Agencies to furnish both professional and clerical help to assist the FmHA county supervisor in farmer program loan processing and related debt adjustment processing activities. The final decisions and responsibilities for all work performed by these Agencies' employees are reserved for FmHA officials. We have no statistics to measure the immediate impact; however, loan processing time will be reduced after such employees are trained and become familiar with their assignments.

STATE PROGRAMS

Question: A number of State legislatures have become involved in farm credit issues. Wisconsin, for example, is talking about having their own State loan guarantee program, with the State paying some of the interest costs. Iowa Farmers Union is urging the Governor to sign legislation setting minimum prices for farm products. To what extent is this happening to your knowledge?

Answer: Over the past ten years, some States have had farm assistance programs. Minnesota was one of the earliest to have a State farm lending program. Other States have passed laws authorizing the issuance of State tax-exempt bonds for such purposes. There are now eight States involved in the use of State tax-exempt bonds for agriculture.

Question: How do programs being proposed by States differ from programs already offered?

Answer: The major programs administered by States involve tax-exempt bonds for agriculture. Funds are disbursed by a specific state authority. They are different from FmHA programs in their basic eligibility and supervision requirements. Each State differs in such requirements. Basically, the State lending authority processes applications received from local banks and either approves or rejects funding of the loan. We believe that States have had very limited participation because of the inability of farmers to project a positive cash flow.

Question: Why are States feeling they have to do this?

Answer: We believe most States feel the need for such programs because of the decline in the agriculture economy and net farm income within their States.

Question: Are current systems and programs not being responsive enough?

Answer: We believe that FmHA's current systems and programs are responsive in meeting the needs of those farmers eligible for FmHA farmer program loan assistance.

FISCAL YEAR 1985 SUPPLEMENTAL

Question: For this fiscal year, you are requesting a supplemental appropriation for salaries and expenses of about $17 million. This is in addition to an $8 million supplemental request for pay cost. Will additional personnel be hired only for the remainder of this fiscal year? The fiscal year 1986 request for salaries and expenses is 35 percent--$124 million--below the fiscal year 1985 with supplementals.

Answer: Additional personnel are being hired by the Agency at the present time. These are temporary employees needed to meet the heavy demand for farm credit and credit restructuring contained in the President's Farm Initiatives. We are conducting our hiring practices this fiscal year in order to conform with our fiscal year 1986 reduced request.

Question: Is it realistic to hire personnel for only four or five months?

Answer: We have much additional workload that needs to be done this year related to the farm credit initiatives. We are using all of our employment options which include the use of temporary employees. These employees are being hired for a 4-month period.

Question: By what time would Congress need to act on the supplemental in order for the funds to be utilized effectively?

Answer: We are operating on a deficiency basis at the present time, and we will need the funds in the fourth quarter of this fiscal year.

CLOSING FmHA OFFICES

Question: Mr. Secretary, your budget proposes to cut FmHA activities by about 50 percent in fiscal year 1986. Do you plan to close any FmHA offices or reduce staff because of the reduction in activity?

Answer: The 1986 budget proposes a decrease of 3,126 staff years and $92 million related to appropriated funds as well as other decreases. We hope to hold the closing of offices to a minimum, but with a reduction of staff years and funds of this size, we would expect most States will be required to close some offices. However, no decisions have been made concerning the extent or location of these reductions.

FmHA RURAL HOUSING

Question: Most housing loans are made from savings and loan institutions, rather than banks. I realize that one of the Administration's goals is to get the Federal Government out of the credit markets, but rural areas face a serious lack of mortgage credit availability.

Rural areas have 30 percent of the Nation's population but only 17 percent of the Nation's savings. Over 500 rural counties have no Federally chartered savings and loans institutions, and non-metropolitan per capita savings in S&L's is less than 50 percent of that of metropolitan areas.

It seems, therefore, that the Federal Government may be the only possible source of credit in these rural areas. How will these areas obtain credit for housing or other community development programs?

Answer: The rural housing programs of Farmers Home Administration, as now constituted, have been operated for more than 20 years. The acute shortages of adequate housing and sources of credit that afflicted rural America when these programs began have been substantially reduced over the past two decades. More than 1.5 million single family homes, and 350,000 rental apartment units have been built or improved, and exist today for families of modest circumstances in rural communities. Conventional credit institutions, increased involvement by nonprofit and charitable organizations, and State and local channels for delivery of housing services beyond the cities have been expanded to provide housing assistance in most distressed areas. The Administration is confident that future Federal support for rural housing can be delivered through the facilities of HUD. Part of that support will be administered through a voucher system and by Community Development Block Grants.

Question: There has been some discussion as to the feasibility of financing the rural housing program through the sale of assets to the public, whether that is done through the sale of real estate inventory or through the sale of some of the loans to the public, instead of to the Federal Financing Bank. This would finance the program, while having no effect on the budget deficit. What is your view on this? Is the sale of assets a common practice within the Rural Housing Insurance Fund? How much of this has been done?

Answer: FmHA has not actively pursued the sale of the loan assets of the Rural Housing Insurance Fund to the public. The sale of loan assets from the Agriculture Credit Insurance Fund has been studied on a pilot project basis. Since the majority of loans within the RHIF yield substantially below current market rates owing to the interest credit provisions of the Housing Act, the loans would be saleable only at deep discounts from face value.

Substantially, all of the RHIF's loans have already been pledged to back Certificates of Beneficial Ownership sold to the Federal Financing Bank. They could not be resold without first repurchasing the CBOs from the FFB. FmHA's agreement with FFB requires that the CBOs repurchased ahead of schedule be repurchased at "market value" as determined by FFB. Gains or losses would be recognized at the time of repurchase based on market interest rates.

WATER AND SEWER LOANS AND GRANTS

Question: The Administration's fiscal year 1986 budget proposes to cut the FmHA water and sewer loans and grants from

$460 million to $75 million and to transfer that responsibility to Housing and Urban Development's Community Development Block Grant.

Rural water contamination is a growing problem. Half the households in rural America are not served by community water systems. A Congressionally-mandated study found that two-thirds of these households drink water that does not meet Federal Safe Drinking Water Act standards. In view of this, how do you justify the reduction in FmHA water-waste disposal loans and grants?

Answer: The proposed fiscal year 1986 budget for water and waste disposal loans and grants will enable the most needy projects to be funded in an efficient and orderly manner. Water and waste disposal funds will be directed to very low income communities experiencing health and safety hazards and not otherwise able to obtain financing from other sources. Grant funds will be used primarily for projects serving the most financially needy communities to reduce user costs to a reasonable level for farmers, ranchers and rural residents. The reduction in Farmers Home Administration funds will be offset by the joint funding of projects with other agencies and private lenders. Additional emphasis will be placed on working with investment bankers and other commercial credit sources to maximize their participation in the funding of water and sewer projects in rural areas.

Question: Isn't it true that small rural towns would have to compete with large cities of up to 50,000 population and that rural water needs would have to compete with other community development needs if this program were included in the Block Grant Program?

Answer: The Community Development Block Grant program administered by the Department of Housing and Urban Development sets aside a percentage of the funds appropriated to be utilized in nonentitled areas, cities below 50,000 population and counties below 200,000 population. Legislation is being proposed to change the distribution of entitlement and nonentitlement funds from 70 percent/30 percent to 60 percent/40 percent. This distribution will allow a larger percentage to be distributed to small communities.

These funds are allocated to States for general uses such as fire stations, water and sewer facilities, etc. Local governments are eligible entities that may receive the grants under this program.

Question: Aren't we trading a program targeted to help rural areas deal with their water programs for a program which may or may not serve to address this important problem?

Answer: We believe the Housing and Urban Development's Community Development Block Grant program can provide the needed services to very low-income rural communities experiencing health and safety hazards. The decision as to what communities or projects receive these funds is up to State and local officials, depending on their needs and priorities.

RURAL DEVELOPMENT PROGRAMS

Question: Mr. Secretary, the Rural Development Policy Act of 1980 gave the Secretary of Agriculture the leadership responsibility for the Federal role in rural development. In view of the fact that your 1986 budget eliminates virtually all rural development activities. How does USDA plan to carry out this role? How can you justify the continuation of the Office of Rural Development Policy?

Answer: If the President's budget is adopted, there will be more than $15 billion in development credit and grant programs that have historically gone to rural areas. Most of that money is not in USDA; it never has been.

The Federal leadership responsibility will be more important than ever, because other departments too often need to be reminded that it is necessary to administer programs in a way that is as sympathetic to the unique situation of rural people. The Office of Rural Development Policy helps the Secretary speak for more than 50 million rural Americans.

There are several means of coordination and leadership at our disposal. The most important is the Cabinet Council on Food and Agriculture, and its working group on Rural Development.

At the operating level, the Secretary has also convened a council of rural affairs representatives. They will help us represent rural interests in all Federal Departments and help each agency remember that people in rural areas cannot be served in exactly the same ways as people in metropolitan area. These men and women, at policy levels in their own Departments, will serve as points of contact and will articulate the rural viewpoint in their work. The Office of Rural Development Policy works closely with members to identify rural issues of concern in each Department and find solutions to rural problems.

Federal money is not the only ingredient in rural development; it is not even the most important one. We have often helped rural people more by working with them to demonstrate to others what they can do, and are doing, with their own resources. For example, the Office of Rural Development Policy has worked with the Main Street Center of the National Trust for Historic Preservation to help them share the experiences of rural officials in rehabilitating downtown business districts. More than 20,000 community leaders in 3,000 communities took part in a national videoconference on this program.

Another of our rural leadership objectives is to produce information of the highest quality on subjects that matter to rural development and to communicate that information to a wide audience within and beyond Washington. The Office of Rural Development Policy carries out this task for the Secretary.

The Secretary is very mindful of his responsibility for rural development coordination and leadership. The funding requested for the Office of Rural Development Policy is needed to maintain the quality of these efforts.

DELINQUENCIES

Question: A GAO report stated that as of June 30, 1984, about 35 percent of the total active borrowers in FmHA's major farmer loan programs were delinquent on one or more of their farm loans. Of these delinquent borrowers, 17 percent were delinquent on at least one FmHA farm loan for over four years. These over 4-year delinquent borrowers have a net delinquent amount of over $2 billion. During the 5-year period June 30, 1979, to June 30, 1984, FmHA's total delinquent loan amounts for the five major farmer loan programs increased from $417 million to over $4.1 billion, an increase of almost 900 percent.

In your opinion, are FmHA farmer loan programs actually improving the long-term financial viability of its borrowers or are they merely postponing inevitable farm failures?

Answer: FmHA is exercising forebearance to the greatest extent possible to keep family farmers on the farm. FmHA is using all of its loan making and servicing authorities, such as guaranteed and insured loans, debt set-aside, rescheduling, subordination, reamortizing, debt adjustment, and deferrals to the maximum extent possible. With the use of these loan making and servicing alternatives, along with a lower inflation rate, the FmHA farm loan portfolio should strengthen. However, all of our borrowers will not be successful and some accounts will have to be liquidated.

Question: What action does FmHA intend to take regarding the 16,093 active farmer loan program borrowers who are delinquent on at least one farm loan for over four years?

Answer: FmHA will continue to evaluate each delinquent borrower's individual financial situation to determine if assistance should be continued. FmHA Administrative Notice Number 1113(1960) outlines the conditions that have to be met for continued assistance to a delinquent borrower. The conditions are as follows: the borrower has acted in good faith, is unable to pay accounts as scheduled, has applied key management practices, has maintained chattel and real estate security and the projected budget realistically indicates that all 1985 operating and family living expenses and accruing interest on the 1985 production loan can be paid from the 1985 planned income. This policy provides the maximum opportunity for a delinquent farm borrower to make the adjustments necessary to have a reasonable chance for success.

Question: Is there any one particular reason that delinquencies increased 900 percent in five years?

Answer: The financial situation of individual farms varies widely. The entire agricultural sector of our economy is going through a period of adjustment, due primarily to the cumulative effects of past inflation, high interest rates, declining land values and unforeseen natural disasters. These factors have all contributed to this tremendous increase in delinquencies.

Question: In what program are delinquencies most prevalent?

Answer: The following table gives a breakdown of the percent of farmer loan program delinquencies as of September 30, 1984.

[The information follows:]

ACTIVE BORROWERS DELINQUENT
AS OF 9/30/84 WITH PAYMENTS CREDITED AS 10/26/84

	ACTIVE BORROWERS		ACTIVE BORROWERS DELINQ			
	NO.	AMT UNPD PRIN OUTSTANDING $1,000	NO.	%	AMT UNPD PRIN OUTSTANDING $1,000	%
INDIV.LOANS:						
FARM OWNERSHIP	123,549	$ 6,798,591	25,245	20	$ 279,475	4
FO - NFE	1,405	52,869	350	25	3,487	7
OL-EXCL.YOUTH	116,397	4,103,022	36,707	32	682,239	17
OL - YOUTH	2,175	7,704	579	27	1,803	23
EMERGENCY	125,778	10,019,714	48,172	38	3,239,261	32
ECON.EMERGENCY	60,459	4,313,387	25,768	43	849,798	20
REC-INDIVIDUAL	225	14,084	60	27	1,345	10
SOIL & WATER	16,865	299,042	4,332	26	27,650	9
ECON.OPPORT.	539	635	474	88	603	95

FmHA RURAL HOUSING

Question: Rural areas have over two million households living in bad housing. Rural areas don't have the credit to provide housing for low-and moderate-income households. In light of this, how do you justify the elimination of the FmHA rural housing program?

Answer: Past history has demonstrated that the combined effects of the private sector, HUD, and VA have provided the financing for 95 percent of all housing in FmHA's service areas through 1979. In so doing, they provided 88 percent of the housing occupied by low and very low-income families. Beginning in fiscal year 1988, 50 percent of the assistance administered by HUD will be directed to rural areas. This would approximate the urban-rural split of federally-assisted units over the past few years.

There has also been an increased involvement by non-Federal sources such as nonprofit and charitable organizations in providing housing assistance in the most distressed areas. In addition, FmHA will continue to provide for emergency repair assistance to its existing borrowers in the amount of $30 million per year for the next several years.

Question: I am told that the HUD housing program under which rural housing would eventually be operated applies only to rental vouchers, which can only be issued for safe, adequate housing. In the cities there may be sufficient housing that meets these criteria, but rural areas are seriously lacking in adequate housing in the general proximities of low-income people.

Is this voucher program the one under which rural housing programs would be administered? How do you justify this move when adequate housing does not exist for this program in rural areas?

Answer: Presently, HUD provides 20 to 25 percent of its assistance to rural or nonmetro areas. By 1988, HUD will raise this ratio to 50 percent between rural/urban areas. This increase will provide a more favorable opportunity for rural residents to receive housing assistance.

HUD indicates that the predominate program for helping families obtain adequate housing in 1988 will be the voucher system. This system will enable families to go into the housing market and rent housing to meet their needs. The voucher system is less costly than home ownership which should result in helping to reduce the Federal deficit.

PRIORITY OF APPLICANTS

Question: FmHA's share of the total farm debt has increased from five percent in 1975 to 12 percent in 1984. Except when program regulations or veteran status provides for preference, FmHA considers approval of farmer loan applications in the order received. During fiscal year 1984, FmHA received 202,673 farmer program loan applications of which 17 percent were rejected and 23 percent were withdrawn or expired before approval.

With increasing demands upon FmHA as a source of farm credit, how does the Agency assure that the most credit worthy farmers are receiving funds, especially in view of the fact that applications for loans are handled on a first come, first serve basis?

Answer: As stated, loan applications are considered in the order received. Time frames are established to determine eligibility and feasibility of applications. When the application package has been completed and received, the loan request is either rejected or approved with only eligible credit worthy farmers receiving loans.

Question: Has FmHA given any consideration to classifying the credit worthiness of its loan applicants?

Answer: We do not use a credit scoring system. As we progress with the implementation of the Coordinated Financial Statement program, we expect to do a better job of classifying the credit worthiness of applicants.

FmHA'S MANAGEMENT AND SALE OF FARM PROPERTIES IN INVENTORY

Question: Under the Farm and Rural Development Act, FmHA is required to determine the suitability of retaining the farm property in a specific FmHA program when FmHA acquires the property. Property that could be used to fulfill the objectives of an FmHA loan program is termed "suitable." Real estate that is not suitable for sale to eligible applicants or has not been sold as suitable property within three years of acquisition is termed "surplus". FmHA can change the designation of the property from suitable to surplus at any time during the 3-year time period, to accommodate changes in property or economic conditions. Suitable property will only be offered for sale to eligible applicants, while surplus property is offered for sale to the public.

Farm property in FmHA's inventory incurs costs including interest on the funds used to finance the property, caretaker fees, property repair and maintenance, etc. FmHA officials estimate that it costs the Federal government at least $10,000 a year to keep a property in inventory. As of April 30, 1984, FmHA had 2,134 farm properties valued at over $400 million in inventory.

Does the classification of FmHA farm property as suitable place an unnecessary restriction on the sale of such property in today's farm real estate market since it can only be purchased by a FmHA eligible borrower?

Answer: Existing statutes and FmHA regulations governing disposal of acquired property permit the reclassification of suitable property to surplus property at any time if there is physical damage or a change in the economic conditions that make the property unsuitable for farmer program purposes. We believe that every opportunity should be given to eligible applicants to permit their purchase of suitable property in order that the program will better serve eligible borrowers and the property will continue to remain a viable, suitable family farming unit.

LOAN PROCESSING POLICIES AND PROCEDURES

Question: What does FmHA consider to be a reasonable criteria for timely processing of loans, particularly operating loans?

Answer: We believe a reasonable time period should be two to four weeks, provided we could have adequate staffing to meet seasonable demand. One of the reasons for going to the approved lender and guaranteed loan program is to speed up approval and processing of applications.

Question: What is the average processing time on a calendar time frame for operating loans from the time the appplication is received until the loan is disbursed?

Answer: Based upon our 1984 sample of a number of States, the data indicates that the processing time for operating loans was approximately 50 calendar days from date of application to loan approval, and an additional 35 days to loan closing. Annual operating loans for crop year expenses normally take less time than operating loans which involve chattel security, debt adjustments, or refinancing. We are working on a funds disbursement system that will transfer loan funds to local banks overnight. This will greatly expedite loan closing.

Question: Does the processing time differ for guaranteed versus insured operating loans? If so, what are the reasons for the difference?

Answer: The limited number of guaranteed loans approved by FmHA provided too small a sample to accurately determine if guaranteed loans take less time to process. However, the

Approved Lender Program should speed up the processing time for guaranteed loans by a substantial amount.

Question: If FmHA does not have information on loan processing time, should it devise a method to acquire it in order to manage the timeliness of the loan process?

Answer: FmHA has considerable information on loan processing time derived through surveys of field offices. Right now we feel that that is the most cost effective procedure. However, we are in the process of developing a new automated program delivery system which will allow us to gather much more of this type data.

Question: Much of the cause of the untimely processing of loans has been attributed to the understaffing in FmHA county offices. How did actual staffing of these offices compare with what the staffing should have been in fiscal year 1984, as shown in FmHA's productivity statistics?

Answer: Our Resource Management System work standards indicated that, based on the workload for fiscal year 1984, FmHA should have used 14,665 staff years. The agency actually used 12,658 staff years.

Question: What are some of the factors besides understaffing that contribute to the length of time required to process an operating loan?

Answer: Based upon our experience in processing operating loans, the major factors affecting the length of time required to process a loan are accurate security agreements, debt adjustments from lenders, and problems associated with real estate appraisals and title clearances.

Question: How does FmHA's processing time compare to other lending institutions--agricultural banks, Production Credit Associations, and other government agencies such as the Small Business Administration--for similar operating loans provided to farmers?

Answer: In the past, many agricultural banks required only a current financial statement, a general knowledge of the farming enterprise and the amount of the request. Within the past few years these policies have changed, and agricultural banks are now requesting more detailed information, and in many instances require a detailed monthly cash flow for the operation. Their processing time has increased to two to three weeks depending on the complexity of the request.

The Production Credit Associations and Federal Land Banks depend on the borrower to provide all necessary financial information and it takes two to three weeks for loan approval. Loan closing processing time will depend on the complexity of the loan.

The Small Business Administration has a very small number of farmers, for whom they provide farm operating credit, and for that reason their loan processing time varies widely. It should be emphasized that we are working with applicants who have already been denied credit by these other lenders so the application procedures may not be comparable.

Question: How does FmHA's process—the steps involved—compare to other lending institutions' process for operating loans? Does FmHA have more steps in its process, if so, why?

Answer: FmHA's loan processing steps consist of the applicant providing a complete application, which consists of a current financial statement and a farm budget; a county committee review to determine eligibility, appraisals of chattels and/or real estate that collateralize the loan; credit decision by the proper loan approval official; if necessary, chattel lien searches and/or real estate title searches; and loan closing. The Farm Credit Associations and Banks have basically the same process as FmHA. They request the same information and normally a Board of Directors reviews each request before loan approval.

LOAN SECURITY AGREEMENTS

Question: What is the impact on the Government's financial position when security property is no longer available to secure a FmHA loan--regardless of whether FmHA consented to the disposal of the property?

Answer: If it becomes necessary to liquidate an account and the value of the security is no longer adequate to cover the debt, substantial losses to the Government will occur.

Question: How does FmHA stay abreast of whether security agreements are being adhered to by its borrowers?

Answer: FmHA's existing regulations require that security instruments be updated each time a loan is made to the borrower. In addition, the FmHA county supervisor is required to make an annual inspection of the borrower's farm to verify that all FmHA security is accounted for and maintained.

Question: Does FmHA compile statistics on a routine basis on the extent of conversion of security property?

Answer: The FmHA conducts national surveys on a routine basis regarding the conversion of security property. The latest survey was conducted in July 1984.

Question: Does a lack of enforcement of security agreements create an environment where borrowers believe they can dispose of security property without penalty?

Answer: FmHA borrowers are thoroughly aware of FmHA's position and their responsibility regarding the accountability of FmHA security. Each borrower must sign Form FmHA 1924-14, Borrower Responsibilities, which states security requirements. Form FmHA 440-4, Security Agreement, also signed by borrowers, advises them of their responsibility regarding FmHA security.

Question: What options are available to FmHA to enforce security agreements when it learns one has been violated?

Answer: The policy of FmHA to collect from its borrowers first, before demands are made on third parties. Also, State Directors have the authority to contract with investigators who will investigate, locate and report facts relating to alleged disposition of security.

Question: Is loan acceleration or seizure of remaining property required under such circumstances, or does FmHA have the flexibility to deal with the borrower to update the security agreement?

Answer: The FmHA has the flexibility of working with borrowers provided they have given the local FmHA county supervisor adequate information to properly account for the disposed security property. Acceleration of the borrower's loan account would be the last resort.

Question: In addition to impacting the Government's financial position, do losses due to conversion of security property reduce the loan funds available to other borrowers—thus impacting the FmHA's ability to provide credit services to other perhaps more worthwhile borrowers?

Answer: The losses resulting from conversion of security property is not a direct factor in the amount of loan funds available to other borrowers.

OPERATING LOAN GUARANTEE PROGRAM

Question: You mention in your prepared statement that a five percent fee would be charged on guaranteed farm operating loans to help offset program costs to Government. What percentage of the operating loans are for one year?

Answer: From a sample of 75,404 operating loans made in fiscal years 1983, 1984 and 1985, 40,282 loans were made for one year, representing approximately 53 pecent of the sample.

Question: Two years?

Answer: This sample also showed that 1,767 loans were made for two years, representing approximately two percent of sample.

Question: Seven years?

Answer: The sample showed 25,534 loans were made for seven years representing approximately 34 percent of the sample.

Question: Would this fee affect a borrower's need to keep the money for the maximum time possible to spread the cost of this fee over more years?

Answer: There would be some advantage to the borrower to borrow the money for the maximum time possible. However, the total interest cost on the loan would increase—the longer the repayment period.

SOIL CONSERVATION LOANS

Question: You have indicated that the small special purpose loans for soil and water use and conservation are being eliminated. Given the reduced Soil Conservation Service budget being proposed, isn't this just further encouraging farmers to abandon practices to conserve our valuable natural resources?

Answer: Our field personnel have a responsibility to advise our farm borrowers on sound production management practices since we are governed by the National Environmental Policy Act regarding planning and environmental reviews. We feel confident our personnel will uphold these principles and will not finance farmers who do not abide by the laws set forth. We believe our borrowers will adhere to good soil management practices.

AVAILABILITY OF CREDIT TO FARMERS

Question: Last week UPI reported that an Iowa Department of Agriculture survey showed that some 1,500 Iowa farmers cannot get the operating loans needed to plant a crop this spring. I understand that similar situations exist elsewhere as well. Are there this many people who simply cannot qualify for the debt restructuring plans being offered, or are there other problems causing this?

Answer: We are not able to speculate as to how many of those 1,500 Iowa farmers in question have applied for FmHA loan assistance. There have been farmers who have appplied for FmHA loan assistance and could not qualify for debt set-aside assistance because of negative cash flow projections. Those farmers who were faced with the closure of their banks and uncertain as to where they might receive operating loans for 1985 have been addressed in part by FmHA and the Federal Deposit Insurance Corporation. We have agreed to work together in reviewing these farm debtors, and FmHA has issued a guarantee to lenders who will provide operating loans for the 1985 crop year, provided the planned operation shows a positive cash flow projection.

Question: It has been reported that as of mid-March only 61 farmers nationwide have been aided by President Reagan's $650 million program of Federal guarantees to help banks restructure farm loans. These guarantees totaled only $8.4 million. I understand that the obligation has increased since then, but participation is still much lower than expected. Why hasn't there been a bigger response?

Answer: In the past, banks have been unwilling to participate in our guaranteed loan programs because they felt there was too much red tape and paper work involved in obtaining a guaranteed loan. We are working to minimize this problem. In May 1984, we started the Approved Lender Program. Since May, we have amended the ALP to meet the needs of the lender. We expect this to result in a substantial increase in lender participation in the guaranteed loan programs.

Question: Are banks unwilling to cooperate with the program provisions?

Answer: Concerning the recent debt adjustment program, the bankers felt they could not afford the cost of a ten percent write-off of outstanding principal and/or interest. This requirement was amended to allow either a combination of a write-off of principal and interest reduction or a reduction in the interest rate equivalent to at least a ten percent principal and interest reduction. Lenders also felt that requiring a cash flow projection of 110 percent was unreasonable, and this provision has been revised to allow for the acceptance of a 100 percent cash flow projection.

Question: Is there too much risk associated with farm loans today, even with the guarantees?

Answer: Risk is associated with any business one might choose to enter in our free enterprise system. Whether the risk is too much must be decided by the farmer and the lender working together. The latest indications we have are that 66.3 percent of all family-size commercial farms have no apparent financial problems, while 6.3 percent are insolvent, and 27.4 percent have serious to extreme financial problems. This would indicate that the majority of the farmers have little problems in obtaining credit, and commercial lenders would be actively seeking these accounts. Many lenders are now requiring farmers to provide detailed financial information, including monthly cash flow statements, to determine financial soundness of the farming operation. This factor alone will eliminate some of the risk in agricultural loan making. Thus, the requirements by FmHA that guaranteed lenders require detailed financial information and provide servicing of the guaranteed loan accounts will enhance the farmer's chances of being successful.

LOAN PROCESSING HISTORY

Question: Several USDA agencies made staff available to FmHA to assist with timely processing of loan applications. Has there been enough help to process all applications in a timely manner?

Answer: Several USDA agencies made staff available to FmHA to assist with timely processing of loan applications. On February 4, 1985, FmHA entered into an agreement with the Agricultural Stabilization and Conservation Service, on February 20, 1985, with the Extension Service, and on March 1, 1985, with the Soil Conservation Service. These agreements provide for those Agencies to furnish both professional and clerical help to assist the local county supervisor in FmHA farm loan processing. We believe the extra efforts made by ASCS and SCS employees will help process those applications in a more timely manner.

Question: What has been the average turn-around time on applications?

Answer: Based upon a limited sample made on all insured farmer program applications received in 1984, the average turn-around time varies from two to three months. The differences in processing time occur especially when a loan is to be secured by real estate, since title clearances and other agreements are time consuming.

Question: The Approved Lender Program of FmHA provides for a more rapid processing of loan guarantees through FmHA. If a lender meets certain requirements, FmHA will not spend as much time on the guaranteed application as it would for other lending institutions.

Last week, the Administration announced steps to further simplify the loan process in order to be able to provide approvals more expeditiously. Part of this was to give the farm credit system approved lender status. What impact do you see this having? Will this decision be implemented in time to assist with loans needed for spring planting?

Answer: Amendments to the Approved Lender Program were published as a Final Rule in the Federal Register on March 22, 1985. The amendments allow member institutions of the Farm Credit System with farm losses comparable to other lending institutions to qualify under ALP. This action should allow most member institutions of the FCS to participate in the program. We expect that this will assist some FCS members with crop loans this spring.

LONG-TERM CREDIT PLANNING

Question: What can or should financial institutions be doing today to help client groups, especially farmers, survive in the short run and prosper in the long run?

Answer: Financial institutions must consider restructuring debt obligations, reducing borrower's indebtedness, reducing interest rates and rescheduling debt obligations to fit the farmer's repayment capacity under today's market conditions. Lenders should refrain from equity financing of farming operations; encourage crop insurance where available; and focus on realistic projections of operating expenses, production levels, commodity prices and the debt repayment capacity of the operation.

Question: What are you doing to develop viable programs to cope with current and long-run credit needs in rural America?

Answer: Interest rates have been lowered and a concerted effort is being made to finance farm families who are unable to obtain credit elsewhere and who have a reasonable chance to succeed. FmHA has implemented the President's credit initiatives that were announced on September 18, 1984. The first initiative is a one-time debt set-aside of up to 25 percent of an FmHA borrower's indebtedness, with a maximum of $200,000. The debt set-aside is for five years without interest. The second initiative provides financial assistance to farmers who are not FmHA borrowers. The Agency can guarantee up to 90 percent of a new note, if the lender will write-off at least ten percent of the existing debt and/or reduce its interest rate up to the amount necessary to achieve a positive cash flow projection. The third initiative provides for contracting of financial and management farm specialists who are available to any farmer who requests such counseling from FmHA. The last initiative is a 5-State pilot project in which contracts for the services of commercial lenders who participate in the Approved Lender Program will be obtained to assist FmHA in servicing farm loans. The States are Iowa, Kansas, Minnesota, Missouri, and Nebraska.

The FmHA can approve qualified agricultural lenders to participate in its guarantee loan program for farm operating and farm ownership loans, through the Approved Lender Program. FmHA may provide the lender with a guarantee not to exceed 90 percent of any loss of principal and interest sustained on a loan. The paperwork requirements have been reduced by using pre-executed agreements between FmHA and the approved lender.

Question: Do you have any task forces established or do you have any research underway to assist in this effort?

Answer: The Office of Rural Development Policy of the Department of Agriculture has the responsibility for this effort and is continually studying and researching these problems.

Question: What do you see as happening when farmers must once again account for the debts which have been set aside as part of current assistance efforts?

Answer: Actions presently in place and being planned include controls over inflation, lower interest rate, and improved marketing techniques, which will stabilize the agriculture economy. As these take place, those farmers who are on the debt set-aside program will have had the time necessary to readjust their production and financial management practices to handle the debts that have been set-aside.

Question: Will they really be any better off?

Answer: The debt set-aside program will not solve all of the FmHA's borrowers' financial problems nor will it allow all FmHA borrowers to remain in farming. For some FmHA borrowers it will simply provide the additional time necessary to develop plans for an orderly liquidation; but for the vast majority it will provide the opportunity to restructure their operations, and thereby handle their obligations.

EFFECTS OF AGRICULTURAL SPECIALIZATION ON CREDIT

Question: Specialization of agricultural production in the United States has brought about an increased dependence on credit for purchased inputs and technology. In your opinion, has specialization led to some of the financial constraints facing farmers now?

Answer: Specialization of agricultural production has led to increased dependence on credit and to some of the financial constraints facing farmers today. At one time, many family farms produced a variety of farm products and were not completely dependent on one or two crops or products. The production of a variety of products assured many family farmers of an acceptable level of income even though one of the crops or products was a failure. As farmers began to specialize, many family farmers were required to incur additional costs for larger and more specialized equipment. With the increased capital costs and greater independence on income from limited sources, many family farmers are now faced with severe financial constraints after several years of below normal production and/or depressed farm commodity prices.

Question: As new technology is developed, there will be tremendous pressure to utilize this in order to be as efficient as possible. Efficiency will be the key to competing successfully in the market place. How does this enter into long-range planning activities for credit institutions?

Answer: Successful farm lenders stay abreast of the latest agriculture technological developments. They have made every effort to implement those advances through sound financial and production planning wherever it could assist borrowers in improving their farming operations. FmHA is a leader in this effort by requiring the use of financial management tools necessary for sound financial production planning.

Question: Will they be willing to make loans for purchases of new technology?

Answer: Progressive agricultural lenders must be willing to make loans for the purchase of new technology, when it will benefit the farmer in becoming more efficient either in production or financial management.

Question: Do you see any change in the need for credit institutions to become involved with technical assistance or supervised credit types of activities in view of increased specialization?

Answer: Yes, many credit institutions are already involved with technical assistance or supervised credit types of activities for borrowers who have specialized operations. As more farm operators become more specialized, credit institutions will find it absolutely necessary to provide a greater role in technical assistance and/or supervised credit types of activities to assure the success of the farming operation and to secure their loans.

Question: Is there a new role for credit institutions to be farm management agencies as well as financial advisers to counsel borrowers on the need to specialize or to shift their production practices?

Answer: In recent years, credit institutions have played and will continue to play a greater role as financial advisers in counseling borrowers to specialize or adjust their production practices. In many instances, credit institutions have agricultural loan officers who have farm management experience or education that is needed to provide such counseling to their borrowers.

INTEREST RATES

Question: Interest payments currently account for some 16-20 percent of farmers' annual operating costs. It seems to me that something must be done to reduce the burden placed on farmers by this major expense item if agriculture is to be profitable. Do you have any data regarding the impact reduced interest rates would have on net returns for the agricultural sector? Do you have any ideas on how to reduce the interest burden in the short-run, other than the debt restructuring activities already in effect? What would you do to provide long-run solutions?

Answer: Interest expenses accounted for about 16 percent of the estimated $135.3 billion in 1983 farm production expenses. However there is no direct source of data to support an analysis of the impact of changes in market interest rates on farm production expenses and net returns. However, if market interest rates were to change enough to impact the average interest rate on all outstanding debt by just one percent from the implied ten percent of 1983, interest expenses could change by about $2 billion.

This is just a portion of the impact on the farm income accounts. Undoubtedly, the change in market interest rates necessary for such an impact on the average interest rate on the outstanding farm debt would be felt indirectly by various suppliers of farm inputs, such as machinery and fertilizer, as their individual production and storage costs would be affected. The prices paid by farmers for these inputs would, therefore, also be affected to some degree.

Changes in inventory holding costs would also lead to impacts on commodity prices received by farmers, as the cost of holding inventories by wholesalers or grains and meats are affected. The stock holdings of farmers themselves may also be impacted as they decide whether to hold or sell commodities. This in turn could impact commodity prices through changes in farm marketing.

Any change in interest expenses due to changes in market interest rates most likely would affect the flow of the finance and insurance sectors, the real estate sector, and most likely, the returns on capital owned by farmers. These changes capture many of the direct effects.

Question: If the National budget deficit could be reduced to the point that interest rates would drop one, two or three percent, what impact would this have as far as the amount of credit that could be available to the rural sector? What impact would this have on helping make agriculture profitable again across-the-board?

Answer: A reduction in interest rates by one, two, or three percent would have little impact on the availability of credit to the rural sector. There is no national liquidity problem for rural lenders. Adequate credit has been available for rural areas, except for brief periods, in some very localized areas where lending institutions have failed. Actions have been taken by FmHA and other agencies to ameliorate the problems in local areas by helping affected rural borrowers find a new credit source. In 1984, interest charges were approximately a $22 billion item among the farm sector's $140 billion total farm production expenses. A reduction of one percent in interest across the board would reduce the farm sector's interest charges about $2.1 billion based on the total sector's debt of $212 billion. Since many existing loans run for a number of years, the response to lower interest rates for the farm sector would not be immediate. Interest charges are a cost item in calculating net farm income, so any decline in interest charges is reflected in a higher net farm income.

Question: I have had farmers complain that the subsidized low-interest rates given to low-income FmHA borrowers are creating unfair competition to other farmers. What is your reaction?

Answer: FmHA farmer programs have been authorized by the Congress to serve a specific clientele, those unable to get credit elsewhere. FmHA holds only 12 percent of all farm debt and has served an important role in cushioning economic shocks to the farm sector caused by price and weather variability. Some farmers effectively use low-interest loans to recover from economic and natural disaster setbacks.

Question: The volatility of interest rates in recent times has prompted lenders to protect themselves through instituting shorter periods of maturity on loans, adjustable rate structures, etc. To what extent has this been the case in the rural sector, and what impact is this having, especially in terms of the smaller, lower-income farmers?

Answer: Variable interest rates are a common phenomenon in this era of deregulation of financial institutions. Also, the Farm Credit System has utilized variable interest rate loans for a number of years. Deregulation of banks has resulted in higher interest rates. Lenders have had to raise interest rates charged on loans, shorten loan maturities, and use variable interest rate loans in order to make a profit. For example, only 17 percent of bank farm non-real estate loans had variable interest rates in 1979; 39 percent had floating rates in 1984. These higher, fluctuating interest rates along with shorter terms have raised costs to all farm borrowers.

AGRICULTURAL CONSERVATION CORPORATION

Question: The Farm Credit Council has proposed an Agricultural Conservation Corporation. The purpose would be to stabilize farm asset values and provide for the conservation of fragile land resources. Do you see a real value of such a corporation?

Answer: The proposed Agricultural Conservation Corporation concept has several purposes. It would serve as a ready buyer for real estate owned by financially distressed farmers, which would tend to stabilize farm asset values and reduce the risk of loss to lenders. However, the ACC could involve substantial cost or risk of loss to investors.

Question: Would the real benefits to be gained offset the cost of the 10-year program?

Answer: At this time, the Department has not completed a thorough study of the real benefits and costs of the program.

Question: Do you feel ACC could accomplish its purposes? Would ACC indeed stabilize farm asset values, for example, if purchases are to be made on the basis of ongoing local land values at the time of sale? Would prices tend to stabilize because there would be a ready buyer?

Answer: We believe the proposed ACC could aid in the stabilization of farm asset values while providing for conservation of fragile land resources. However, we question whether ACC could serve these purposes on a self-sustaining basis and do not suppport proposals for large Federal subsidies for ACC.

Question: Two services that the ACC would provide that might not be available through existing channels are to provide a ready buyer to assist financially-strapped individual farmers so they can avoid foreclosure, and to let banks cash in their non-liquid assets so these would be available for other purposes. Would you agree with this analysis?

Answer: Yes, the proposed ACC would provide a ready buyer of assets owned by financially distressed farmers and at the same time would allow banks to sell their non-liquidating assets in order to improve their liquidity position, thus making bank funds available for other purposes. It would thus help alleviate the financial distress caused in the agricultural community by farmers facing bankruptcy or foreclosure by their lenders. The ACC could also benefit financially secure farmers in that it would reduce erosion of the value of their assets. However, the costs of providing these benefits could be substantial, and we do not support proposals which provide ACC with large Federal subsidies.

Question: From your perspective, might there be other reasons for or against establishing the ACC?

Answer: We reserve further comments on the program until legislation has been formally proposed and we have completed a full assessment of the program.

Question: Many farmers today would like to voluntarily retire all or some of their debt by selling part of their assets -- perhaps part of their machinery or land. The problem is that prices are so low right now that they can't afford to do this; the losses would be too severe. There is just too much on the market today, and too few people who are in an economic condition to pay reasonable prices who are interested in making such purchases. In this setting, do you feel that the proposed ACC would provide a viable, fair solution to the problem? Would the program provide a fair value for properties to either individual farmers or credit institutions holding foreclosed properties? Wouldn't everyone except perhaps ACC lose with land and used equipment market values as they are today?

Answer: As previously stated, the Department has not completed a thorough review of the ACC proposal since legislation has not been introduced at this time. However, we would consider the ACC proposal as a possible measure to help resolve this problem.

EMERGENCY DISASTER LOANS

Question: You propose to eliminate emergency disaster loan program in counties where crop insurance is available. Will poultry producers and other non-crop producers still be eligible to receive disaster loans?

Answer: Livestock and poultry producers who have suffered qualifying production and/or physical losses to livestock and poultry will be eligible for FmHA emergency disaster assistance in counties named eligible for FmHA emergency disaster assistance. However, livestock and poultry producers sustaining losses on crops that were eligible for crop insurance would not be eligible for emergency assistance from such crop losses.

AGRICULTURAL PROGRAMS ADJUSTMENT ACT OF 1984

Question: Section 608 of the Agricultural Programs Adjustment Act of 1984, Public Law 98-258, directed the Secretary of Agriculture to report to Congress on the feasibility of a program which would allow farmers with delinquent Farmers Home Administration loans to amortize their debts from revenues generated by harvesting pine trees planted on crop and forage land. This report was due by October 1, 1984. What, in general, were the results of this study?

Answer: A copy of the report entitled, "Feasibility of Using Future Revenue from Southern Pine Production to Amortize the Debts of Farmers Home Administration Delinquent Borrowers" was submitted to Congress in March, 1985.

The report concludes that there may be opportunities for FmHA borrowers to pay off their debts to FmHA by converting marginal lands from unprofitable cropping or pasture use to tree crops. These borrowers would, however, have to make arrangements for satisfying their debt to other lenders and meet a number of other criteria. Further, they would have to be willing to forego an annual income from farming.

The opportunities may be limited to a relatively small number of borrowers located primarily in the Coastal and Piedmont Regions of the South. For these borrowers, tree crop production may provide a way out of an unprofitable farming operation, without having to relinquish ownership of the land. For the Nation, conversion of marginal lands to tree crop production would help conserve our soils, reduce farm surpluses and assure an adequate supply of softwood in the future.

The Department will continue to assess these opportunities. FmHA has been directed to determine whether it is possible to develop appropriate regulations for the long-term deferral of existing borrowers' debt in conjunction with conversion to tree crop production. As this determination is made, new legislation may need to be proposed.

Question: Please submit a copy of this report to this subcommittee for its files.

Answer: We will be happy to submit a copy of the report to the subcommittee.

[The information follows:]

FEASIBILITY OF USING FUTURE REVENUE FROM SOUTHERN PINE TREE PRODUCTION TO AMORTIZE THE DEBTS OF FARMERS HOME ADMINISTRATION DELINQUENT BORROWERS

PREFACE

This study is required by Section 608 of Public Law 98-258, the Agricultural Programs Adjustment Act of 1984, enacted April 10, 1984. The section reads as follows:

"Notwithstanding any other provision of law, the Secretary of Agriculture may develop and implement a program for the amortization of delinquent Farmers Home Administration loans from future revenue generated by timber crops planted and managed on lands previously used to produce commodities or pasture and subject to Farmers Home Administration liens. The Secretary shall submit a report to Congress by October 1, 1984, outlining the feasibility of such a program and the plan for its implementation."

The legislation provided the Administration with broad discretion for defining the specific purposes and features of such a program.

INTRODUCTION

Interest in tree crop production cuts across several areas of concern to the Department, including:

-- Natural resource and environmental concerns about finding alternative uses for highly erodible lands currently used for crop production.

-- Concerns about protecting the Government's interest in the repayment of outstanding obligations on FmHA farm loans, as well as providing for the financial well-being of FmHA borrowers who are currently unable to repay those loans under existing production patterns, through no fault of their own.

-- Concern about farm production surpluses such that the Department's programs and policies are consistent with the reduction of surpluses even in areas where these programs and policies are designed primarily to serve other purposes.

-- Concern that the Nation's inventory of softwood in some regions of the country is not increasing fast enough to keep up with consumption and, thus, that there is a prospect of substantial, long-term price increases for wood and wood products.

USDA has encouraged tree crop production primarily through technical assistance and funding for state administered programs. During the 1950's under the Soil Bank Program, the Department made payments to farmers who took land out of crop production and planted trees instead. Presently, $5 to $6 million of Agricultural Conservation Program (ACP) and $12.5 million of Forestry Incentive Program (FIP) funds per year are used for cost sharing tree planting assistance. About three-fourths of this assistance is used in the South.

Scope of Analysis

This study is limited to southern pine tree production, specifically loblolly pine, and to FmHA loans in the States of Arkansas, Louisiana, Mississippi, Alabama, Georgia, Florida and South Carolina.

Loblolly pine is, by a wide margin, the most commonly planted species in the South. The species is adaptable to a wide variety of sites (including erosive soils), gives consistently high yields, and is suitable for large scale nursery production. When managed for sawtimber, loblolly pines typically are thinned for pulpwood at 17 to 20 years; thinned again, also for pulpwood, at 25 to 35 years; and finally harvested at 40 to 45 years. Revenue returns are received from both thinnings and final harvest. While the species may be harvested as early as 25 to 30 years of age, older trees are significantly more valuable for use as sawtimber.

Market conditions for pine tree production are best in the Gulf Coastal and Lower Piedmont regions of the South, including parts of Texas, Louisiana, Arkansas, Mississippi, Alabama, Georgia and Florida. While conditions vary somewhat throughout these regions, prices for logs and pulpwood are generally favorable because of the number and proximity of competing processing plants. In the Upper Piedmont, Appalachia and further North, where pine production is not as predominant and processing mills are not as accessible, prices are considerably less. Thus, the potential returns to such production are not as favorable.

The analysis was limited to the use of existing data sources. In part, this decision was made on the expectation that the recent automation of FmHA's reporting system on the financial status and characteristics of its farm borrowers would provide an opportunity for more in-depth analysis than had previously existed. A scientific survey to obtain data on a few specific items not included in FmHA's data base would have improved the analysis, but it was considered to be too costly and time-consuming to conduct.

Previous Findings

A recent USDA study, Conversion of Southern Cropland to Southern Pine Tree Plantings, concluded that there are 17 million acres of crop and pasture land on the Upper Coastal and Piedmont regions of the South that are capable of yielding higher annual net returns per acre from southern pine tree production than from their current use.

This finding was based on production budgets which showed only modest and, in some cases, negative annual net returns for the current use of the land. The entire 17 million acres consisted of land in soil groups that are marginal for crop use. One-third of this land was in crop use and two-thirds was in pasture.

The study concluded that the future revenue from southern pine tree production was sufficient to provide for a 12 percent per year return to investment for direct costs before taxes. These direct costs included $43.00 per acre for tree planting and $4.00 per acre for maintenance purposes. Also, there was an allowance for 15 percent loss in yield. The estimate of the rate of return was based on constant 1979 prices measured in terms of real purchasing power.

The study made no attempt to reflect land and other fixed costs, including taxes. These were assumed to remain the same for conversion to southern pine trees as for existing crop production. Therefore, the study did not provide information about the feasibility of southern pine tree production as a means of amortizing farm real estate debt. But, it provided useful background data for the current study.

Specific Objectives

The current study was designed to meet the following specific objectives:

- Develop estimates of the future revenues that could be expected from southern pine tree production.
- Determine the amount of debt that could be amortized with such revenue.
- Identify potential impediments, and
- Describe the financial status of FmHA borrowers and determine the extent to which these borrowers could be reached by a program that would allow them to convert to trees from their existing land use.

FINANCIAL FEASIBILITY

Long-Term Outlook For Timber

Pine tree production in the South is a commercially viable enterprise. Large scale corporations, as well as small private land owners, including farmers and other investors, are planting pine trees in increasing numbers. Table A shows the growth in number of acres of plantings since 1945. Somewhat more than half of the acres planted by non-industrial, private owners received cost share assistance from Federal, state, or industry sources.

Table A: Average Annual Tree Plantings in the South by Type of Ownership

Years	Non-Industrial Private Owners	Forestry and Other Industries	Public Lands	Total
	....	Thousands of Acres	....	
1945-49	69	34	14	117
1950-54	146	176	30	352
1954-59	572*	321	50	943
1960-64	498*	461	85	1,044
1965-69	222	455	92	769
1970-74	198	694	112	1,004
1975-79	274	925	100	1,300
1980	395	981	114	1,490
1981	391	700	97	1,180
1982	415	1,181	92	1,688
1983	480	1,223	90	1,793
1984	589	1,158	93	1,840

* Reflects impact of tree planting under the Soil Bank Program

The growth in plantings reflects optimism about the future demand for softwood timber and fiber products. Various studies, including those done by USDA, suggest that the demand for these products will grow in direct relationship to continued growth in the ecoomy and population. 1/ These studies imply that even more plantings than indicated by the trend prior to 1978 are needed to preclude a shortfall in supply. However, there are a number of uncertainties about both supply and demand, including the potential for technological changes, trade considerations such as the recent growth in softwood imports from Canada, instability in the housing market, and prospects for changes in the relative mix of hardwood and softwood products. 2/

On balance, there appears to be a good chance that the demand for softwood timber and fiber products will remain strong; in which case, prices, in constant dollars, will continue their long-term increase.

Basic Approach to Measuring Amortizable Debt

Tree crop production provides revenue 20 to 45 years into the future, while the debt on the land used for such production occurs in the present and increases annually as interest accumulates. To determine the feasibility of amortizing the debt with the future revenue from such production, both the debt and the revenue must be expressed in the same time frame. In this study, present value was used - the future revenue was discounted to obtain a present value which was then compared to the present value of the debt (i.e. the principal or current outstanding balance). Both present values were expressed on a per acre basis. Alternative rates of 5% to 10% were used to discount the future revenue. For each rate, consideration was then given to the debt accumulating interest at the same rate. If the present value of the future revenue exceeded the current debt level, then tree crop production was determined to be a feasible strategy for amortizing debt with interest on these debts accumulating at the specified rate.

A compound rate was used to discount the future revenue, and the determination of feasibility assumes that interest on the debt would also be compounded. This assumption means that the future revenue would be sufficient to cover the debt and all interest, including interest on interest - all of which would be deferred until the tree crop revenue becomes available. Because of the relatively long waiting period before revenue is available, interest costs far exceed the present value (principal) of the debt, except for the lowest interest rates. Interest on interest represents a major portion of this cost.

The study estimates of present value of the future revenue from tree crop production are net of planting costs, but they do not reflect taxes and other expenses that may be incurred over the waiting period. These other expenses however, are relatively small. For example, the present value of taxes based on an annual rate of about $2 to $4 per acre, is only about $25 to $50 per acre compared to about $1,000 per acre in land costs.

Estimates of Future Revenue

First, future timber prices had to be estimated. Two sets of estimates were developed to reflect the lower and higher range of prices that are found in different areas of the South.

Each set included a price for the three main timber products, namely:

(1) pulpwood - the least valuable product usually derived from immature trees, branches and residuals and used primarily to make paper products,

(2) chip and saw - small logs, the inner portions of which can be made into lumber while the outer portions are converted to wood chips in a simultaneous process.

(3) sawtimber - timber which can be used for lumber and lumber products, including plywood.

Southern timber prices vary significantly among price zones. The variation tends to be greater among zones within states than among averages for each of the states. In general, the higher price zones are concentrated in the Coastal and Lower Piedmont areas where processing plant capacity is greater and markets are more active.

The price sets used in the study are based on prices for January and February, 1984, as reported in Timber Mart South. They reflect prices received by the producer, net of harvesting and transportation costs.

Average prices for each price zone were used to construct ranges of low, medium and high prices. The midpoints of the low and high ranges were then used as the price estimates for the study. In terms of 1984 dollars, these price estimates are as follows:

Table B: Southern Pine Timber Stumpage Prices, In 1984 Dollars

Product	Unit	Low	High
Pulpwood	Cord	10	30
Chip and Saw	Cord	30	50
Sawtimber	MBF *	75	175

* MBF means thousand board feet.

To obtain estimates of future prices, the 1984 dollar estimates were inflated by 3 percent and 5 percent per year. Separate rates for real growth and overall price inflation were not specified. However, the probable range of real growth in pine timber prices was assessed to be between zero and 1.5 percent annually. Thus, the implied rate for overall inflation ranges from 1.5 to 5.0 percent.

These rates may seem conservative. However, it should be remembered that they are to reflect the annual rate that is expected to occur, on the average, over the next 20 to 45 years. Despite higher rates of short-term inflation, particularly in the 1970's, very few prices have changed by more than 3 to 5 percent annually over such a long period of time.

Correspondingly, the study used alternative discount/interest rates of 5 to 10 percent, which is below the range of current rates, but consistent with long-term experience.

To compute yields, four management options were considered. These options represent different production periods, ranging from 20 to 45 years, with intermittent thinnings for the longer periods before final harvest. For each option, yield estimates were constructed in accordance with available research results on site productivity, planting rates and anticipated losses.

A site index of 60 for a base of 25 years was used to measure productivity, which means that the dominant trees of a pine plantation would reach 60 feet of height at 25 years of age. This measure is consistent with research findings related specifically to loblolly pines grown on marginal converted farmland. The planting rate was assumed to be 700 trees per acre. 3/

Losses were considered in two different ways. First, it was assumed that up to 300 of the 700 trees planted per acre could fail to survive through the 20th year. Such losses are considered normal for trees grown under field conditions, and they would not require replacements in order to maintain production at an appropriate level. In fact, without such losses, there would be too many trees per acre for efficient sawtimber growth.

Second, it was recognized that there could be failures, in terms of either a complete loss of a planting or a partial loss of such magnitude that there would not be enough trees left to justify keeping the land in production. The significance of such failures would, of course, depend on their timing. An early loss could be recouped easily through replanting, while a loss occurring just before final harvest could be disastrous.

In USDA's previous study, Conservation of Southern Cropland to Southern Pine Tree Plantings, the failure rate was determined to be 15 percent; about two-thirds involuntary and one-third voluntary, such as conversion to residential uses or back to farming. Voluntary conversions and other such actions can be controlled by contractual agreements between FmHA and its borrowers. As long as FmHA maintains a lien on the real estate as well as the tree crop, the agency can require prior approval over such actions. If necessary, the agency can accelerate the repayment of the borrower's indebtedness.

Certain failures, such as fire damage, involve significant salvage values which can be applied to the borrower's indebtedness.

Nonetheless, there is some degree of financial risk to FmHA for failures. This risk, however, may not be equally distributed among borrowers. Therefore, for the purpose of determining the level of debt that could be amortized through tree crop production, it was assumed that borrowers would not be penalized for risk. In other words, the level of debt they might be allowed to amortize would not be adjusted for failures. Had the levels been adjusted, the risk of loss would be reduced, but not eliminated.

FmHA could reduce the risk of loss by charging borrowers a fee or higher interest rates (subject to any interest rate limitations in current legislation) based on an actuarial estimate of the risk of loss - in effect, requiring borrowers to pay the cost of insurance against such loss.

Yield estimates for the four options are as follows:

Table C: Estimated Yields Per Acre from Southern Pine Tree Production, for Four Different Management Options.

Stand Age	Activity	Products Pulpwood	 Chip and Saw	 Sawtimber
I. FINAL HARVEST AT AGE 20				
20	Final Harvest	19 cords	18.3 cords	--
II. FINAL HARVEST AT AGE 30				
30	Final Harvest	20.5 cords	40.4 cords	--
III. FINAL HARVEST AT AGE 40				
20	Thinning	4.8 cords	4.6 cords	--
40	Final Harvest	16.5 cords	23.6 cords	11.7 MBF
IV. FINAL HARVEST AT AGE 45				
17	Thinning	3.7 cords	3.5 cords	--
25	Thinning	4.0 cords	8.0 cords	--
35	Thinning	4.0 cords	5.6 cords	2.8 MBF
45	Final harvest	4.3 cords	--	20.7 MBF

Combining the above yield estimates with the price estimates after adjusting for inflation, and discounting the results at rates of 5 to 10 percent provides estimates of the present value of future revenue as follows:

Table D: Present Value of Future Revenue from Southern Pine Tree Crop Production, Net of Planting Costs

Discount Rate	3% Inflation Final Harvest Age in Years 20	 30	 40	 45	5% Inflation Final Harvest Age in Years 20	 30	 40	 45
	.... 1984 Dollars Per Acre							
	Low Price Zones							
5	456	751	891	1,112	692	1,430	1,889	2,388
7	298	406	421	532	460	758	903	1,130
9	191	213	195	258	303	415	433	548
10	151	151	129	178	244	304	298	384
	High Price Zones							
5	964	1,433	1,929	2,514	1,438	2,588	4,049	5,430
7	646	793	936	1,214	971	1,449	1,959	2,549
9	432	435	459	605	656	811	964	1,245
10	352	320	320	431	539	606	679	882

Interpretation of Results

In Table D, note that under the assumptions of high prices, 5% inflation and final harvest at 45 years the future revenue discounted at 10% has a present value of $882 per acre. This result can be interpreted to mean that up to $882 of debt per acre could be amortized at a compound interest rate of 10%. Further, note that at lower prices, less inflation and shorter production periods to final harvest, the present value of the revenue and, thus, the amount of debt that can be amortized is less. On the other hand, as the discount/interest rate declines, the present value of the revenue rises and, thus, the amount of debt that can be amortized also rises.

As a further benchmark for interpreting the results in Table D, it should be noted that a substantial portion of the land in the South that might be suitable for conversion to pine tree production has a market value within the range of $800 of $1,000 per acre. Interest rates, however, are currently well above the rate that would provide for the amortization of the total value of this land. For example, the current interest rate on long-term U.S. Treasury notes is about 12.5%. A number of projections, nonetheless, reflect long-term interest rates as low as 6 to 7 %.

The results do not include any appreciation in land values. If appreciation occurs, it would provide a capital gain to the landowner, but would have no direct impact on the amortization of the debt other than to provide additional security to lenders holding a lien on the property.

OTHER FEASIBILITY CRITERIA

In addition to the financial feasibility criteria considered above, there are economic and policy criteria to be met by prospective program participants.

Marginal Land

As mentioned earlier, a recent USDA study found that there are 17 million acres of crop and pastureland in the Upper Coastal and Piedmont Regions of the South that are capable of yielding higher annual net returns per acre from southern pine tree production than from their current use. On about one-fourth of this land, the rate of erosion for cropping exceeds 10 tons per acre per year--twice the generally accepted tolerance level. Land with excess erosion is distributed throughout the Upper Coastal and Piedmont Regions of the South as indicated in Figure 1.

The remaining three-fourths of the 17 million acres found to be of higher value for tree crop production than for other crops or pasture use consists of land that can be cropped without excessive erosion, but produces only marginal returns in crop use or as pastureland. This land includes a number of different soil groups and is also fairly well distributed throughout the Upper Coastal and Piedmont Regions of the South.

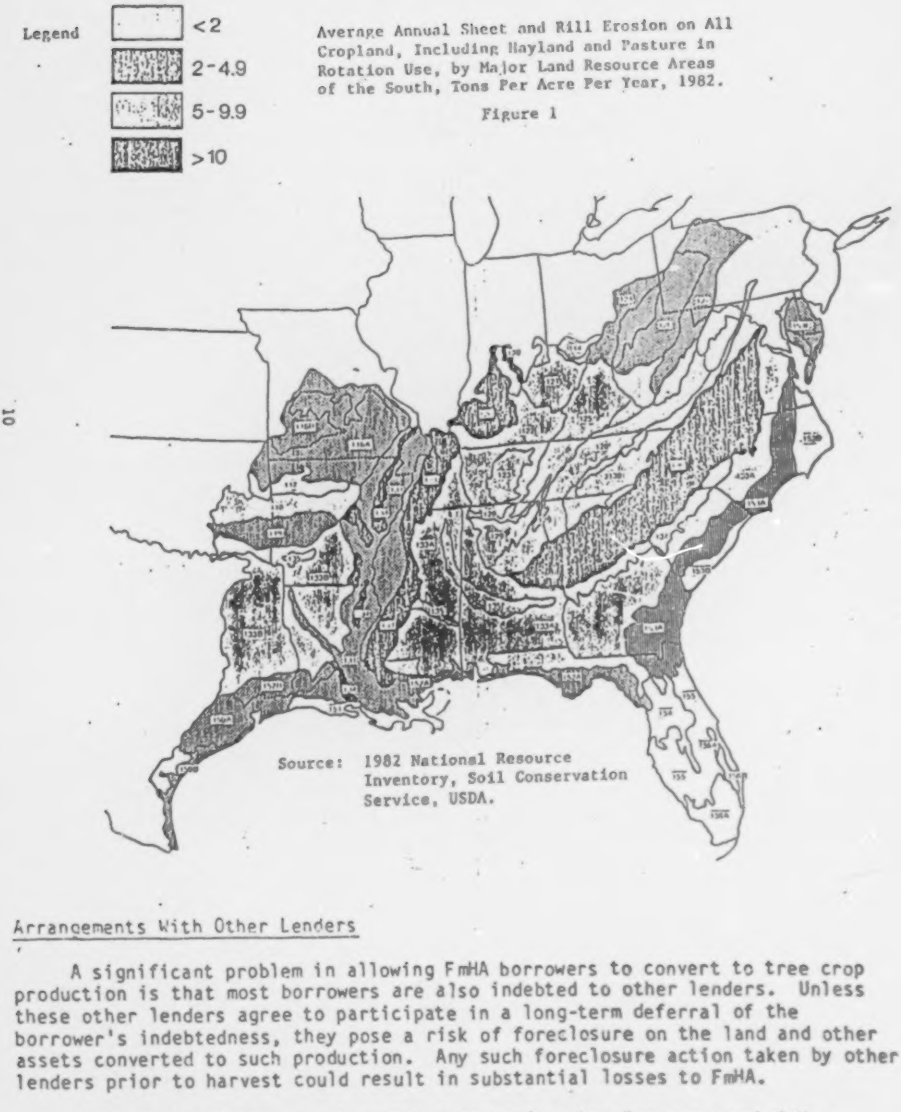
While tree crop production may be more profitable than other uses on marginal land, there is no evidence that it is generally more profitable on productive land. Farmers who have mostly productive land are unlikely to be interested in converting to tree crop production. To encourage them to do so by offering assistance through a Federal program would be contrary to the operation of basic market forces. But a Federal program may be justified to assist those farmers who are operating on marginal land, 4/ particularly FmHA borrowers to whom USDA has a commitment to stay with as long as they can show repayment ability and act in good faith.

Many farms include a mix of marginal and more productive land. In which case, conversion to tree crop production on the marginal portion of the land may improve the profitability of the overall operation. For individual farms, the potential profitability of converting to tree crop production must be worked out on a case-by-case basis.

Financial Stress

The fact that an FmHA borrower is delinquent does not necessarily mean that his/her farming operation is threatened. A borrower may be delinquent because of short-term cash flow difficulties that do not require a major adjustment in the farming operation.

On the other hand, an FMHA borrower who is not delinquent may be undergoing financial stress of a nature that cannot be resolved through servicing or additional lending. Such a borrower should not be denied opportunities for assistance that might be made available to delinquent borrowers.



Average Annual Sheet and Rill Erosion on All Cropland, Including Hayland and Pasture in Rotation Use, by Major Land Resource Areas of the South, Tons Per Acre Per Year, 1982.

Figure 1

Source: 1982 National Resource Inventory, Soil Conservation Service, USDA.

Arrangements With Other Lenders

A significant problem in allowing FmHA borrowers to convert to tree crop production is that most borrowers are also indebted to other lenders. Unless these other lenders agree to participate in a long-term deferral of the borrower's indebtedness, they pose a risk of foreclosure on the land and other assets converted to such production. Any such foreclosure action taken by other lenders prior to harvest could result in substantial losses to FmHA.

There may be instances where the borrower's other lenders are holding security that is not also used to secure the indebtedness to FmHA. In which case, there may be opportunities, such as the sale of secured assets, that would satisfy the borrower's other lenders.

But, in most cases, the same assets are used to secure the borrower's indebtedness to both FmHA and other lenders. Even though FmHA may hold the senior position in liens, other lenders could force foreclosure and probably would take such action at any time they wished to cut their losses in carrying the borrower's account and saw the possibility of recovering at least a portion of the borrower's indebtedness. Under such circumstances, FmHA might be required to buy out the other lenders, but to do so would require that the Government assume significantly greater obligations.

Table E shows the distribution of FmHA borrowers with emergency disaster and economic emergency loans by FmHA's share of the borrower's total debt. This distribution indicates that there is a fairly even split between FmHA and other lenders in terms of being the primary lender. It also indicates that other lenders hold at least 25 percent of the borrower's total debt in about three-fourths of the cases.

TABLE E: Distribution of FmHA Borrowers with Emergency Disaster and Economic Emergency Loans by FmHA's Share of the Borrowers Total Debts, 1982

FmHA Share of Borrower's Total Debt	Emergency Disaster		Economic Emergency	
	Number of Borrowers	Percent of Borrowers	Number of Borrowers	Percent of Borrowers
less than .25	277	31.7	275	27.9
.25 - .49	184	21.1	212	21.5
.50 - .74	221	25.3	246	24.9
.75 - 1.00	192	22.0	253	25.7
Total	874	100.0	986	100.0

Source: Office of Management and Budget (OMB) Special Survey (preliminary results)

It should be noted that the above results do not necessarily reflect the status of lien positions. While data on lien positions are not available, FmHA probably holds more junior positions than its share of total debt, because of the agency's willingness in recent years to subordinate its lien position in order to provide opportunities for other lenders to participate in the extension of operating credit to borrowers who could not obtain such credit otherwise. Where FmHA holds only a junior position in the borrower's security, other lenders obviously are in a stronger position for negotiating over the borrower's financial needs for converting to tree crop production.

Amortizable Debts with No Federal Subsidy

Levels of debt that may be amortizable under various interest rate and other assumptions are presented in Table D which appears on page 16. These levels reflect compound rates of interest. Assuming that borrowers are charged a rate at least equal to the cost of Treasury borrowing and the rate is compounded, the Federal subsidy would be limited to administrative costs and any benefits borrowers received from the interest rate being less than the rate in the private market for comparable credit.

Under FmHA's existing farm programs, borrowers may receive a subsidy during periods of delinquency or deferral. No interest is charged on interest during these periods, which provides a subsidy to the extent of the Government's cost of borrowing to finance the delinquency or deferral of interest payments. Further, as part of a program that was recently announced by the President to restructure farm debt, borrowers are currently eligible a set-aside of up to 25% of their total indebtedness, or $200,000, whichever is less, for up to five years, with no interest charged on principal during the set-aside period.

The subsidy feature of these policies, however, is relatively short-term in nature. To apply them to the long-term deferral of all interest and principal payments, as would be required in a program to amortize debts from tree crop production, would be considerably more costly to the Government. At current interest rates, the cost of borrowing to cover the deferral of interest for 45 years would be several times larger than the amount of principal involved. Further, such a policy would be highly inequitable because of the limited number of borrowers who might be able to participate in such a program.

Consequently, the study findings are based on the borrower being charged the full cost of borrowing funds to defer all principal and interest payments until revenue is received. Where a portion of the revenue is received prior to final harvest, that portion is assumed to apply to the borrower's outstanding balance as soon as it is received.

Market Value of Land

Debt levels to be amortized under the program must be secured and, thus, limited to the market value of the land. There are three reasons for this limitation. First, it will be several years before the tree crops acquire any significant value, in which case their use as security is risky. This circumstance is different than the case of annual crop production being used as the sole security for operating credit that must be repaid at harvest. Second, future revenue from the tree crops may fall short of amortizing the debt due to physical or economic loss. Thus, the land could be needed to provide for the full repayment of the loan, either through foreclosure or voluntary conveyance, or as security for refinancing. Appreciation in land values, equal to the interest rate would fully secure the borrower's debt level throughout the production period.

Finally, without a limitation to the market value of the land, there would be an incentive for borrowers to use the program to amortize debts incurred for past operating expenses and other purposes unrelated to tree crop production. Use of the program in this manner would be contrary to sound lending practices.

It should be noted that the market value of marginal land converted to tree crop production may be consideraby less than the average per acre debt of borrowers with a mix of marginal and more productive land. In this case, the market value of the marginal land must be properly assessed so that FmHA receives adequate security and does not, in effect, have to "write-off" borrowers past debts by taking land into the program at higher "book-value" than can be recouped in the market.

SELECTED CHARACTERISTICS OF FmHA BORROWERS

General

Currently, FmHA has about 275 thousand farm borrowers. These borrowers farm about 180 million acres and account for about $35 billion in gross farm income. About 34% of the borrowers are delinquent; over half have debts in excess of 70% of the value of their assets, which means that they are likely to be under financial stress. Table F provides data on selected characteristics of FmHA borrowers for the nation and the seven state study area.

Table F: Comparison of Selected Characteristics of FmHA Borrowers, for the Nation and the Seven State Study Area

Characteristic	Nation	Seven State Study Area
Number of Borrowers	275,000	50,762
Average Assets	$257,865	$202,085
Average Debts	$186,212	$167,928
Average Acres Farmed		
Owned	222	180
Rented	438	388
Average Farm Income (Gross)		
Crops	$61,143	$76,246
Livestock	$34,726	$16,398
Average Farm Expenses	$72,768	$74,988

Within the universe of FmHA borrowers in the seven state study area, there is very little basis for identifying those borrowers who may be interested in converting to tree crop production. Only 2% of FmHA's borrowers had to leave farming due to financial difficulties last year. Those borrowers who stayed are likely to continue to make every effort to remain in farming, and FmHA's current loan making and servicing policies are aimed at encouraging them to do so. Before converting to tree crop production, borrowers must be willing to forego an annual income from farming - a difficult decision as long as they remain optimistic about a recovery in farm prices and income.

Land Ownership

A significant portion of FmHA's borrowers either do not own land, or own only a limited number of acres which are used primarily for a farmstead. For the states inlcuded in the study, 55% of the borrowers owned less than 50 acres. While tree crop production can be efficient on as little as 10 to 20 acres, ownership of 50 acres was assumed to be a lower limit for effective participation in a program to amortize debt through tree crop production. Data on the extent to which FmHA borrowers own marginal land and whether such land represents only a portion of the borrowers' holdings or entire farming operations is not available. However, it is believed that most farms with marginal land also include some more productive land, and only a small number of farms include only marginal land.

Levels of Debt and Degree of Financial Stress

The distributions shown in Table G reflect the individual records of about 2,500 FmHA borrowers in the Southern States of Arkansas, Louisiana, Mississippi, Alabama, Georgia, Florida and South Carolina. Each of these borrowers owns more than 50 acres of land. This restriction was used to exclude borrowers with limited or no potential for conversion to tree crop production. Further, a number of edit checks were used to restrict the sample to borrowers with complete records.

Data for the distributions were obtained from FmHA's newly automated farm record keeping system which the agency refers to as the Farms Report. This system includes borrowers who received at least one FmHA loan between 1982 and 1984. These borrowers may have received either a regular farm ownership loan, farm operating loan, soil and water loan, or an emergency loan. They may also have had an outstanding balance with FmHA at the time they received the loan that brought them into the record keeping system. The restriction of data to borrowers included in the record system may mean that the results are not fully representative of all FmHA borrowers, but the extent of any such bias is not expected to be large. Further, no other data source was available, short of a field survey which would have been time consuming and costly to conduct.

The distributions also include only those borrowers served directly by FmHA. The record keeping system does not include borrowers with guaranteed loans that are made and serviced by private lenders.

Table G: Distribution of FmHA Borrowers and Amount of Total Debt by Total Debt Per Acre, Seven State Study Area*

Total Debt Per Acre	Number of FmHA Borrowers	Total Amount of Debt Owed FmHA & Other Lenders
	...........Percentages	....
Less than $1,000	47.2	27.1
$1,000 to $1,499	18.1	20.6
$1,500 to $1,999	12.4	17.4
$2,000 and more	22.2	34.9
All	100.0	100.0

* Includes only borrowers who own 50 acres or more

Total debt includes both real estate and non-real estate debts owed to FmHA and other lenders.

Table G shows that the more deeply indebted borrowers account for a larger portion of total debt than the number of borrowers they represent. It also shows that substantial portion of FmHA borrowers are fairly deeply indebted.

Further information on the extent of financial stress of FmHA borrowers is shown in Table H which provides a distribution of borrowers by total debt per acre and by total debt to asset ratios.

Table H: Distribution of FmHA Borrowers by Total Debt Per Acre and Total Debt to Asset Ratios, Seven State Study Area*

Total Debt Per Acre	Total Debt to Asset Ratios: Less Than .4	.4 to .699	.7 to .999	1.0 or More	All
	.... Percentage of borrowers				
Less than $1,000	18.1	17.5	9.1	2.6	47.2
$1,000 to $1,499	0.6	5.5	8.2	3.9	18.1
$1,500 to $1,999	0.1	2.6	6.0	3.7	12.4
$2,000 or More	0.2	1.6	7.8	12.6	22.2
All	19.1	27.0	31.1	22.8	100.0

* Includes only borrowers who own 50 acres or more

Among FmHA's borrowers in the seven state study area, about 23% have total debts in excess of their total assets. These borrowers have no equity in their operations; if required to liquidate even at fair market value for their assets, they would not be able to cover their total debts. The majority of these borrowers have total debts per acre of $2,000 or more and must be considered to have the most serious financial problems.

Another 31%, with total debt to asset ratios of .7 to .999, must also be considered to be under severe financial stress at current interest rates and stable or declining land values. Among this group, there is a fairly even distribution of borrowers by total debt per acre class.

A third group of borrowers consists of those with total debt to asset ratios of less than .7. The vast majority of these borrowers have total debts per acre of less than $1,000. This group may include a large number of fairly conservative borrowers who may soon be ready for graduation to private lenders.

As indicated earlier, the total debt to asset ratios used in the above table reflect both real estate and non-real estate debt and assets. Table I provides a distribution of borrowers by classes of real-estate debt and real-estate debt to asset ratios for the 54% of borrowers with total debt to asset ratios of .7 or more. This distribution shows that only about 24% of these borrowers are in better financial condition in terms of real-estate alone (i.e, having a real-estate debt to asset ratio of less than .7) than in terms of total debt. The distribution also shows that about half of the remaining 76% (i.e., 39% of the total) have no equity in their land (i.e., real-estate debt to asset ratios of 1.0 or more). These results suggest that the liquidation of non-real estate assets and other such strategies would be of limited use toward resolving the financial problems of these borrowers.

Table I: Number of FmHA Borrowers by Real Estate Debt Per Acre and Real Estate Debt to Real Estate Asset Ratios, Seven State Study Area, for Borrowers with Total Debt to Asset Ratios of .7 or More*

Real Estate Debt/Acre	Real Estate Debt to Asset Ratios: Less Than .4	.4 to .699	.7 to .999	1.0 or More	All
	.... Percentage of Borrowers				
Less Than $1,000	7.6	13.1	21.5	13.2	55.4
$1,000 To $1,499	--	2.1	9.8	12.6	24.5
$1,500 To $1,999	--	0.7	4.1	5.3	10.2
$2,000 or More	--	0.1	2.1	7.7	9.9
All	7.6	16.1	37.4	38.8	100.0

* Includes only borrowers who own 50 acres or more

Data limitations precluded the construction of distributions for only the amount of debt borrowers owe FmHA. However, in order for a borrower to consider converting to tree crop production, such conversion must be feasible in terms of the borrower's total debt, not just the amount owed FmHA. In other words, the future revenue in present value terms must be sufficient to cover the borrower's debts to both FmHA and other lenders. Therefore, the conclusions presented in the next section are based on such coverage.

CONCLUSIONS AND POLICY CONSIDERATIONS

Findings

Most FmHA borrowers who have less than $1,000 total debt per acre are in relatively good shape financially. Their debt to asset ratios tend to be below .7 and if they own land its value is likely to be sufficient to cover their total debts. If required to discontinue farming, these borrowers could probably do so by selling off their land and other assets and receiving back at least a portion of their equity. Therefore, they are unlikely to be interested in converting to tree crop production, except where they have some marginal land that could be converted to tree crops without having an adverse impact on the cash flow from the rest of the farming operation.

Nonetheless, there is a group of FmHA borrowers who (1) own at least 50 acres of land, (2) have a total debt to asset ratio of .7 or more, (3) owe less than $1,000 real estate debt per acre, and (4) have a real estate debt to real estate asset ratio of .7 or more.

This group comprises about 8.5% of FmHA borrowers in the seven state study area 5/ and represents about 4,300 borrowers and 2.4 million acres of production in the seven state study area. Conversion to tree crop production could be feasible for borrowers in this group, assuming high prices, 5% inflation and final harvest at 45 years, and a 10% interest rate. Before such conversion could occur, however, borrowers would need to satisfy their non-real estate debt. To do so would probably require that they sell off their machinery, livestock and other chattels at close to market value. They would have little, if any, equity returned to them from such sale, and virtually no room to absorb any loss on the sale.

Current interest rates on FmHA loans are only sightly higher (i.e., 10.25% operating loans and 10.75% for ownership loans) than the 10% rate required for tree crop production to be feasible for these borrowers.

However, FmHA holds only slightly more than half of the debt owed by these borrowers. Interest rates on the other half held by private lenders are currently 13% or more. Thus, the blend rate is currently 12% or more, or at least 2% over the rate required for tree crop production to amortize debts of up to $800 - $900 per acre.

The more the interest rate drops, of course, the larger the group of borrowers for whom conversion might be feasible. At a 7% interest rate, the present value of the future revenue under the most favorable assumptions exceeds $2,500 per acre. At this level, virtually all FmHA borrowers could be considered candidates for conversion, at least in terms of having less debt than the amount that could be amortized through tree crop production. About 18% of these borrowers meet the criteria of owning at least 50 acres of land and having debt to asset ratios of .7 or more for both total debt and real estate debt.

Implications

The study findings suggest that tree crop production could be used to amortize the debts of about 8.5% to 18% of FmHA's borrowers in the seven state study area. This finding includes borrowers who are heavily indebted (i.e., having debt to asset ratios of .7 or more) and willing to convert their entire farming operations of 50 acres or more of owned land to such production.

Partial conversions could be feasible for any borrower with some marginal land. Interest rates would not have to drop to 7% in order for such conversion to be feasible. Tree crop production might not amortize a full share of the borrower's debt. But, as long as it covered direct costs and contributed toward amortization of the borrower's debt, tree crop production might be feasible on marginal land for which the borrower had no better use and could not sell for close to the per acre level of his/her debt.

The study findings may, however, overstate the feasibility and potential interest among FmHA borrowers in converting to tree crop production. A number of key limitations identified earlier could not be reflected in the findings, primarily because of data limitations. The informed judgment of FmHA officials who reviewed the study results is that the number of potential participants could be limited to about 1,000 borrowers, all factors considered.

Policy Options and Recommendations

A number of important considerations in developing a program for amortizing FmHA loans through tree crop production have already been discussed; specifically, that such a program should be limited to:

- Land that is of marginal value for crop production. This may include land that is currently being used for crops as well as permanent pastureland.
- FmHA borrowers who are under severe financial stress, such that foreclosure or voluntary liquidation of their existing farming operation is likely.
- Circumstances whereby the borrower may be able to either satisfy his or her debts to other lenders, or obtain the participation of such lenders in the long-term deferral of these debts. Without this limitation, FmHA would have no assurance that the borrower's tree production would not be disturbed prior to harvest by foreclosure action that could be taken by other lenders.
- Debt levels that can be amortized without a Federal subsidy. This means, among other things, that interest would accrue on interest as well as on the principal that is deferred over the production period. The interest rate would be at least equal to the Treasury's long-term cost of borrowing.
- No more than the market value of the land. This limitation is needed to secure the borrower's indebtedness, especially in the earlier years before the trees developed commerical value for harvest. Further in the event of shortfalls in future revenue such that the borrower's indebtedness could not be fully satisfied at final harvest, FmHA could use its security interest in the land to require the borrower to refinance the remaining indebtedness.

Within the above limitations, some of the options for implementing a program and USDA's recommendations are as follows:

IA. On a pilot basis limited to the high price zones of the South, or

IB. As an on-going program for all (financially stressed) FmHA borrowers who can demonstrate, on an individual basis, that conversion to tree crop production will result in the amortization of his or her debts within a reasonable time period.

USDA Recommendation: Because of the long term nature of tree crop production, there is no practical way to conduct a pilot test. While there appear to be opportunities in the high price zones of the South for FmHA borrowers to amortize a considerable amount of debt by converting to tree production, it would be unfair to exclude borrowers in other areas without further consideration. However, the program should be limited to softwood production because the longer production period, lower prices and larger uncertainties about the future demand for hardwoods makes it difficult to justify their inclusion in the program.

IIA. Limited to borrowers who are willing to convert their entire farming operation to tree crops, or

IIB. Open to borrowers who wish to convert any portion of their existing operation to tree crops.

USDA Recommendation: The program should not be limited to the conversion of entire farms. Many farms include a portion of marginal land which may be more productive in tree crops than in existing crop or pasture uses. Partial conversions, however, should be based on realistic values for the marginal land. These values may be considerably less than the average (per acre) value of farms with a mix of marginal and more productive land. Further, partial conversion should not be undertaken where it would have an adverse impact on returns for the remaining portion of the farming operation. This means that partial conversion should be limited to land that is not earning a return to fixed costs and that is not necessary to maintain an efficient level of operation for returning variable costs.

IIIA. With a maximum deferral period of 40 years, or

IIIB. With a shorter deferral period, which would limit the program to the production of pulpwood, or require participants to refinance after the trees have acquired value as pulpwood.

USDA Recommendation: Limiting the program to less than a 40 year deferral period would impose severe restrictions on the level of debt that could be amortized. While the trees will acquire a certain amount of value as pulpwood after 20-25 years, their value as sawtimber would be just beginning to accrue. Program participants may not be able to arrange refinancing with other lenders, particularly if land values remain relatively stable or decline. To require them to repay FmHA after only 20-25 years could result in a loss of potential income as well as a risk of foreclosure for the remaining debt on the land. Therefore, the program should provide for a deferral period of up to 40 years.

IVA. With participants charged a fee or a higher interest rate based on a estimate of potential losses to FmHA, or

IVB. With participants liable for their own losses, but not charged a fee or higher interest rate to provide for the contingency of loss to FmHA if not all participants are able to repay.

USDA Recommendation: FmHA's risk of potential loss is not expected to be significant. Program participants will be liable for their own losses and FmHA will retain a security interest in the land. Thus, FmHA's risk of potential loss will be limited to the unlikely circumstance of a participant sustaining a loss in excess of the value of the land. Participants with smaller losses relative to the value of land should be able to obtain refinancing from other lenders. If necessary, FmHA could offer to refinance them in lieu of taking foreclosure action.

FOOTNOTES

1/ See, for example, USDA reports relating to the Forest and Rangeland Renewable Resources Planning Act of 1974 (RPA).

2/ For an analysis of these uncertainties see Haynes, Richard W. and Darius M. Adams, "Changing Perceptions of the U.S. Forest Sector: Implications for the RPA Timber Assessment," American Journal of Agricultural Economics, Vol. 65, No. 5, Dec. 1983.

3/ Smalley, G. N. and Robert L. Bailey, Yield Tables and Stand Structure for Loblolly Pine Plantations in Tennessee, Alabama, and Georgia Highlands, USDA-Forest Service, Southern Forest Experiment Station, 1974, and

CAO, Q.V., H.E. Burkhart and R.C. Lemin, Diameter Distributions and Yields of Thinned Loblolly Pine Plantations, Wildlife Resources, Virginia Polytechnical Institute and State University, 1982.

4/ The Soil Conservation Service (SCS) maintains precise information on soils that may be regarded as marginal.

5/ This finding is computed as follows:
A= Percent of total borrowers who own 50 acres or more.

B= Percent of borrowers included in A who have total debt to asset ratios of .7 or more.

C= Percent of borrowers included in B who have real estate debt to asset ratios of .7 or more and average debt per acre of an amount that can be amortized through tree crop production (i.e., real estate debt of less than $1,000 per acre).

Thus A B C = Percent of borrowers who meet all criteria.

A= .45
B= .54 (From last line of Table H)
C= .35 (From first line of Table I)

.45 .54 x .35 = .085 or 8.5%

QUESTIONS SUBMITTED BY SENATOR MCCLURE

Question: Mr. Calhoun and Mr. Naylor, thank you for coming to this meeting. I appreciate having the chance to be able to speak with you concerning some issues of importance to the State of Idaho and to the well being of many of the farmers around the nation.

The Farmers Home Administration has presented a budget request which terminates some of the programs which have been in use for many years, such as the rural housing programs, rural development and farm credit. The housing programs will be turned over to the Department of Housing and Urban Development while most agricultural credit assistance will be in the form of loan guarantees.

This is the part which concerns me. The Administration announced last fall a new Debt Adjustment program which was designed to help troubled borrowers both within and outside FmHA. Those already with FmHA would be allowed to set aside up to 25 percent of their debt for up to five years with no interest accruing. Those outside FmHA would be allowed to come to FmHA for a Government guarantee if their banker would write down more than ten percent of their outstanding debt and show that the farmer could show repayment at 110 percent of cash flow. Very few people took advantage of this program. There were several reasons given as to why few people used this--the banks stated that they took too much loss, the FmHA saying that the banks were waiting for a better deal.

This better deal came in February when FmHA changed the program to allow the banks to write down interest and principal and it allows qualification at 100 percent of cash flow. This should have enticed even more bankers to come to FmHA for loan guarantees under this program. As of last week their were only 65 farmers who had been able to qualify for this program.

How many farmers have qualified for the Debt Adjustment interest and principal write down as of this week?

Answer: A telephone survey of the State Offices on March 21, 1985, indicates that 73 applications for the Debt Adjustment program have been approved.

Question: How many farmers have applied nationwide?

Answer: We do not know how many farmers have requested their lenders to consider using the debt adjustment program. The telephone survey of State Offices showed that 561 applications for the guaranteed debt adjustment program have been received from lenders and are under review by FmHA field offices.

Question: How many farmers do you expect, of this group, will qualify?

Answer: We cannot yet fully answer this question. However, FmHA will approve guaranteed loans for all applicants if the review and credit analysis allow FmHA to determine that a debtor meets FmHA's basic eligibility and other requirements for a FmHA guaranteed loan.

Question: How many additional personnel have been added nationwide to handle the additional loan volume initiated by this program?

Answer: The FmHA has allocated 1,284 additional temporary personnel to States with heavy workload to implement the new farmer credit initiatives. Personnel within the States are being detailed to areas of greatest need and overtime pay is being granted as necessary.

Question: Have any been added in Idaho?

Answer: There were no additional temporary employees hired in Idaho.

Question: Why not?

Answer: We were unable to identify a substantial need for additional employees.

Question: How many Idaho farmers and ranchers have applied for the debt adjustment program? Both FmHA borrowers and bank customers? How many have received help from this program?

Answer: As of this date, no bank has requested a loan guarantee under the debt adjustment program in Idaho. The Idaho FmHA Farmer Programs Staff is continuing to advise commercial lenders of FmHA's guaranteed farmer programs. A total of 1,494 FmHA borrowers have requested debt set-aside assistance, 75 have been granted debt set-aside assistance, 241 have had their notes rescheduled or reamortized, 515 have not qualified for debt set-aside and the remainder of the requests are still under review.

Question: The newest announcement dealing with the Approved Lender Program was made last week. If this will improve service why was it not done earlier—September when the original program was announced?

Answer: At the time of the original announcement on May 4, 1984, the seriousness of bank losses was not as evident as it is today. As bank losses increased, it became necessary for FmHA to amend the Approved Lender Program.

Question: I have contacted the State Director of FmHA--there are no approved lenders in Idaho. There has been only one bank to even express interest in becoming an approved lender. Why are the banks not participating in this program?

Answer: We believe that part of the problem exists because of the banking system in Idaho. There are three main banks in Idaho with branch offices throughout the State. Due to this organizational structure, the branch banks have the necessary resources within their systems to provide the necessary funding for any loan a bank within the system might request, resulting in little advantage to date for these branch banks to pursue guaranteed lending and the Approved Lender Program. The Farmer Programs staff in Idaho plans to conduct an information and training session in the near future to advise the banks in Idaho of the FmHA guaranteed programs, and it is expected that this will generate some more interest and participation in the ALP.

Question: The fiscal year 1986 budget proposal shows that more reliance will be placed upon the guaranteed program. What procedures are being proposed or implemented which will involve more farmers and lenders in writing more guaranteed loans?

Answer: Our recent changes are still being studied by the banking industry and there has been an increased interest in the guaranteed program. We are currently reviewing our guaranteed loan procedures to determine if some flexibility can be built into the program, particularly in the area of servicing and liquidation.

LIQUIDATION PROCESSING

Question: Discuss the difference between FmHA and SBA in terms of processing liquidations. How does this procedure differ between FmHA, SBA, and the banks?

Answer: The major difference between FmHA and SBA in terms of handling the liquidation of guaranteed loans is that once the determination is made to liquidate a guaranteed loan account, FmHA requires the lender to liquidate the account. Under the SBA program, the lender is released from the responsibility of liquidating the account, and SBA assumes the responsibility of liquidating the account.

Question: Does the FmHA liquidation procedure keep many banks out of the guaranteed program?

Answer: Even though FmHA and SBA liquidation prodcedures differ, we do not believe that banks are unwilling to participate in the FmHA guaranteed programs because of the procedure of liquidating FmHA guaranteed loans.

Question: How many?

Answer: There is no indication that any banks have refused to participate in the guaranteed program because of FmHA's liquidation procedure.

Question: Mr. Naylor, you have stated in a directive that if a bank is an approved lender, loan applications will have a 5-day turn around time in the FmHA office. However, many State Directors do not feel that the directive is specific in this regard and some banks are experiencing two to three week turn around?

Answer: We feel the directive is very specific. If banks submit complete and realistic plans, they can expect a quick turn around.

Question: What do you expect of the FmHA offices which deal with approved lenders?

Answer: An Administrative Notice was sent to all State and County Offices on March 13, 1985, outlining the county supervisor's responsibilities regarding the processing of guaranteed loans received from approved lenders. This AN very clearly states that acceptable applications will be presented to the county committee for a determination of eligibility within five working days after receipt.

QUESTIONS SUBMITTED BY SENATOR ANDREWS

Question: In November, 1983, FmHA officials met with representatives of the Cheyenne River Sioux Tribe regarding the looming credit crises for Indian farmers and ranchers. At that meeting, certain guarantees were made, including the following:

(a) FmHA would place greater emphasis on assisting Indian borrowers to cope with their special needs;

(b) When the Economic Emergency Loan Program was implemented, FmHA would try to reschedule and reamortize existing loans to Indian operators;

(c) When Indian trust land is liquidated or foreclosed upon, the land would be held in inventory until efforts were made to find an Indian buyer so that the land would not come out of trust.

What steps has FmHA taken in terms of emphasizing the special needs of Indian borrowers?

Answer: The FmHA continues to work and assist many Indian borrowers in need of special assistance. Many States have special Indian coordinators to assist in making loans to Indian borrowers and resolving any special problems. FmHA is constantly working to improve our working relationship with borrowers, including those borrowers that are members of an Indian tribe.

Question: How many Indian operators at Cheyenne River had their loans rescheduled or reamortized under the Economic Emergency Loan Program?

Answer: FmHA does not maintain separate records which identify Indian borrowers from non-Indian borrowers. However, the Timberlake, South Dakota, County Office which services the Cheyenne River Indian Reservation has rescheduled and/or reamortized 52 borrower loan accounts during the period January 1984 through January 1985.

Question: Has FmHA in fact held Indian trust property in inventory, or has the land been sold to non-Indians? How many acres of trust land at Cheyenne River have passed into non-Indian ownership due to FmHA-induced liquidations or foreclosures since November 1, 1983?

Answer: The FmHA does not hold any Indian trust property in inventory that previously belonged to members of the Cheyenne River Sioux Tribe. Since November 1, 1983, no property owned by members of the Cheyenne River Sioux Tribe has passed into non-Indian ownership due to FmHA liquidations or foreclosure action.

Question: FmHA failed to utilize several million dollars of Indian land acquisition loan funds last year. How many tribal applications were received in fiscal year 1985, and how much money was requested in those applications? How many tribal applications were not acted upon even though received prior to the end of fiscal year 1985? How many applications were rejected in fiscal year 1985, and what amount of money was requested in the rejected applications? How many applications were approved in fiscal year 1985 and for how much money?

Answer: In fiscal year 1984, three Indian land acquisition loans were made, totaling $2.62 million. At the present, we know of ten applications pending, however, no loans have been approved to date in fiscal year 1985. Several applications were pending at the end of fiscal year 1984 which may yet result in approved loans during fiscal year 1985. Based on the average size loan that was made in fiscal year 1984, the ten applications could exceed $9 million. We know of no rejected applications in fiscal year 1985; however, several of the pending applications may be withdrawn by the tribe, because of various reasons, or the dollar amounts of the loans requested may be changed.

Question: How long does FmHA take to process such applications?

Answer: The processing time for Indian land acquisition loans may take a minimum of three months. However, Indian land acquisition loans can be very complex, and there are instances where the processing time may take up to one year, depending on the amount of preliminary work that was completed prior to filing a formal application.

Question: FmHA takes the position that Indian tribal governments may not assume the debts of Indian operators who have mortgaged land to FmHA. What is the basis in law for this position?

Answer: FmHA regulations prohibit the Indian tribal government from assuming individual loans made to Indian operators at eligible rates and terms. Indian tribal governments cannot be considered as an eligible borrower for individual operating and farm ownership loans because the intent of the law is to promote individual farm ownership and operators of family sized farms. We wish to assure you the Agency will do all that is possible, within the intent of the law, to assure that Indian land properties remain in Indian ownership.

Question: What policy objectives would be served or disserved by allowing tribal governments to assume such debts in order to preserve the tribal land base?

Answer: Allowing the debts of Indian operators to be assumed by the Indian tribal government may help preserve the tribal land base. However, we do not believe it is the statutory intent to permit Indian tribal governments or any other governmental body to assume loans that were designed for the purpose of promoting individual land ownership.

Question: Would FmHA support or oppose amendments to allow tribes to assume such debts should amendment be necessary?

Answer: FmHA has authority to make Indian land acquisition loans to tribes permitting them to purchase land, including land that is owned by individual members of the tribe. Therefore, an amendment is not necessary to allow tribes to assume individual Indian loans.

QUESTIONS SUBMITTED BY SENATOR ABDNOR

Question: Recently stories have appeared that only about 6,000 farmers nationwide will be helped by the Debt Adjustment Program. When I was involved in improving this program, we were assured by the Department that it would help many more farmers than this. Why will such a small number of farmers be helped?

Answer: FmHA amended its account servicing regulations on October 19, 1984, to incorporate the special debt set-aside program. As of September 30, 1984, 141,687 farm loans totaling $5.1 billion were delinquent. It is estimated that 30 percent of FmHA's 62,881 farm ownership and operating loan delinquent accounts will be rescheduled or reamortized at limited resource rates to develop a positive cash flow projection and will not need debt set-aside. The current FmHA operating loan and farm ownership regulations permit regular operating loan and farm ownership loan accounts to be rescheduled or reamortized at the limited resource rates provided the borrower operates no larger than a family size farm.

It is estimated that 20 percent of the 73,940 economic emergency and emergency delinquent accounts will be rescheduled or reamortized at lower rates than existing notes to develop a positive cash flow and will not need debt set-aside.

It is assumed that ten percent of the 108,035 remaining delinquent accounts would not qualify for debt set-aside. As of March 21, 1985, 105,761 borrowers had requested debt set-aside. These requests are expected to be processed to conclusion within the next few weeks.

Question: I agree completely that the banks must do their part to make the debt adjustment program work. Has the Secretary met with the bankers from all over the nation to encourage their participation?

Answer: On September 18, 1984, President Reagan asked the Secretary of Agriculture to work with private lenders to assist individual farm borrowers to restructure their indebtedness. The debt adjustment program was implemented and significantly expanded the cooperation between the Federal Government, commercial lenders, and the farm credit system.

Question: Have you encouraged the President to meet with the bankers, much like JFK did during his administration?

Answer: The Office of the President, Department of Treasury, the Comptroller of Currency and the Federal Reserve are working with commercial lenders to resolve farm credit issues. On February 6, 1985, Secretary Block announced additional initiatives designed to further help financially distressed farmers.

Question: About a month ago Secretary Block assured me and several other farm State senators that there would be no shortage of FmHA direct operating loans. Has the Department lived up to its promise?

Answer: There will be no shortage of FmHA insured operating funds for eligible farming operations. Adequate funds for fiscal year 1985 will be available to handle operating loan needs.

Question: Are there any States which have a shortage of direct funds?

Answer: Funds will be managed to assure that such imbalances do not occur.

Question: During the past month, the President has made several unsympathetic and erroneous statements concerning the farm credit crisis. Just to refresh your memory, the President stated that only four percent of farmers in the nation were in trouble. About a week later in a private meeting with the President, he used this same figure. I corrected him strongly, but what I want to know is who is giving him this information?

Answer: In the context of his remark, the President referred to an estimate of the percentage of farmers whose financial problems appear to be insolvable and who are likely to be forced to give up farming.

Question: Have you or the Secretary briefed the President?

Answer: The President is kept advised of the situation, directly by the Secretary and through Cabinet organizational channels.

Question: Why then is he still using the four percent figure? It seems to me that you aren't doing your job.

Answer: The estimate the President used refers to farmers who are likely to be forced to give up farming. It is correct in that context.

Question: When was the last time the Secretary met with the President on the farm credit crisis?

Answer: The last time the Secretary met with the President on the farm credit crisis was March 20, 1985.

Question: Or, perhaps a more pertinent question, just who is advising the President? When he makes jokes about the lives of hard-working farmers and ranchers and suggests that we should export our farmers instead of grain, I think someone who is working for the man ought to be fired. Very simply, I'm at the end of my rope with these kind of statements. What have you done to correct this situation?

Answer: I think some of these statements are taken out of context. The President's serious concern and regard for farmers in financial straits was expressed in his message to the House of Representatives on March 6, 1985, relating to bill H.R. 1096.

QUESTIONS SUBMITTED BY SENATOR KASTEN

Question: Wisconsin was allocated some 40 staff-years less in 1984 than the National Office resource allocation formula called for it to have. As you know, the formula attempts to assess need for FmHA personnel based on workload.

Subsequently, the formula was recalculated, and Wisconsin's rcommended allocation substantially reduced. When additional staff-years were allocated last December, therefore, Wisconsin received just one.

I'm concerned that Wisconsin is being short-changed because the formula is not accurately measuring workload. For example, although Wisconsin has not had a high volume of emergency loan applications, we now have about 5,300 farm loan applications. Wisconsin FmHA does not have enough personnel to process all of these in a timely manner.

Please explain the evident discrepancy between actual workload and that measured by the formula.

Answer: The workload measured by the formula considers a projected loan-making workload for each State. Frequently, a State's actual workload will fluctuate due to drought and other emergency situations temporary in nature. Changes in program levels may and will occur from year-to-year and State-to-State. Significant short-term shifts in program levels between States could, if translated immediately into personnel shifts, cause the Agency to require reductions-in-force in some States. We try to avoid such reductions in favor of attrition because of the disruptive effects sudden shifts would have on the Agency.

Similarly, we have attempted to limit staff-year increases in line with a State's ability to have and train large numbers of new people in a short time. FmHA programs are complex and new employees require six months to one year on-the-job before they are proficient in FmHA policies and procedures.

Staffing changes are, therefore, usually made gradually. In this way, increases in employment will be supported by real growth in workload and will be permanent. We are reviewing all States' staffing levels and making adjustments wherever possible to place staff where workload occurs.

Question: Is it possible to recalculate the formula allocation so as to be more equitable to States like Wisconsin?

Answer: We are making every effort to provide an equitable distribution within the total staff resources available to the Agency. The additional staff years that were issued in January 1985 were distributed to States which were understaffed according to workload. No other States received increases. When the fiscal year 1986 budget is enacted into law, we will again review the projected loan making and loan servicing of each State and make the necessary staff-year adjustments.

Question: Farmers Home prepared a chart last year showing formula-recommended full-time equivalent allocations, actual allocations in 1983, and actual allocations in 1984, for each of the States served by FmHA.

Could you supply me with an updated chart, displaying the same information, plus formula and actual allocations for each State for 1985?

Answer: The updated chart with additional information for fiscal year 1985 follows:

FmHA DISTRIBUTION OF STAFF YEARS BY STATES

	(1) FY 1982 Computed Ceilings*	(2) FY 1983 Initial Ceilings	(3) FY 1983 Actual FTE	(4) FY 1984 Final FTE Allocation	(5) FY 1984 Basic Formula Allocation	(6) FY 1985 Basic Formula Allocation	(7) FY 1985 Permanent FTE Allocation	(8) FY 1985 Temporary FTE Increases***
Alabama	287	289	293	289	270.6	272.9	289	+7
Alaska	25	25	24	26	25.0**	26.0**	26	
Arizona	107	109	115	113	97.9	100.0	113	
Arkansas	320	338	348	342	318.3	325.9	342	+17
California	188	223	202	232	236.2	270.2	241	
Colorado	110	114	111	118	115.1	113.5	118	
Delaware	114	116	117	120	118.8	115.7	120	
Florida	195	199	187	204	203.8	204.0	204	
Georgia	278	306	314	315	314.5	319.9	316	+12
Hawaii	70	70	67	70	70.0**	70.0**	70	
Idaho	160	166	161	170	163.7	148.2	170	
Illinois	222	257	255	267	285.9	325.0	281	+19
Indiana	202	229	251	238	246.7	256.6	242	
Iowa	257	292	292	304	319.3	350.5	315	+37
Kansas	187	201	193	207	205.7	202.7	207	+16
Kentucky	271	306	310	318	326.9	325.1	320	+17
Louisiana	235	259	258	266	265.8	270.8	267	+19
Maine	174	176	181	180	143.7	139.1	180	
Massachusetts	119	123	123	127	128.4	125.6	127	
Michigan	205	240	239	250	269.6	278.5	260	+14
Minnesota	231	266	250	277	279.2	289.0	280	+22
Mississippi	415	451	451	451	396.5	404.1	451	+14
Missouri	309	336	333	344	344.1	349.9	345	+42
Montana	112	118	114	122	113.1	114.6	122	+19
Nebraska	164	191	181	197	206.7	200.5	198	+19
New Jersey	104	106	104	110	93.1	91.5	110	
New Mexico	109	111	108	117	92.2	96.5	117	
New York	222	257	227	267	290.6	283.9	271	+8
North Carolina	411	447	435	461	486.2	457.1	461	+12
North Dakota	200	205	207	209	188.5	194.7	209	+23
Ohio	167	177	170	182	222.9	247.7	201	+10
Oklahoma	279	281	306	288	266.8	273.1	288	+20
Oregon	123	128	130	132	131.3	127.9	132	
Pennsylvania	186	214	194	223	256.3	258.1	231	
Puerto Rico	162	184	187	194	212.4	179.3	191	
South Carolina	230	234	230	238	238.1	236.3	238	
South Dakota	183	190	186	197	236.2	216.7	202	+27
Tennessee	320	334	342	338	324.0	338.2	338	+11
Texas	501	506	509	514	512.0	508.3	512	+38
Utah	109	112	108	120	121.8	151.3	126	
Vermont	135	137	132	143	120.3**	131.7**	143	
Virginia	231	256	250	259	263.0	267.8	261	
Washington	121	136	131	142	141.8	142.6	141	
West Virginia	148	150	154	154	151.3	142.9	154	
Wisconsin	209	244	222	254	294.4	258.0	255	+20
Wyoming	75	77	78	81	66.4	64.2	81	
	9,182	9,886	9,780	10,170	10,175.1	10,266.1	10,266	+443

* Computed from ceilings for permanent full-time and other positions.

** Administrative allocation: Vermont includes an administrative allocation of 10 for the Virgin Islands.

*** Based on number of borrower requests for debt set-asides as of February 6, 1985, and operating and emergency loan applications as of December 31, 1984.

The staff years issued in January, 1985, which became a part of the permanent FTE allocation were distributed to States which were understaffed according to workload. No other States received increases. The additional temporary staff years shown in Column 8 of the chart were issued to assist county office staffs in processing farm loan applications and other work related to the President's Farm Credit Initiatives. This allocation was based on the number of borrower requests for debt set-asides as of February 6, 1985, and the number of operating loan and emergency loan applications on hand as of December 31, 1984.

Question: I understand that some States, including Wisconsin, have had considerably fewer FTE positions allocated to them than the formula calls for them to have, while others are heavily overstaffed.

An example of the latter is Maine, which in 1984 had 36 more FTE positions than the formula called for.

With the need for timely processing of FmHA loan applications so great in States like Wisconsin, can you tell me what steps are being taken to redress this imbalance.

Answer: A temporary hiring authorization for 60 temporary employees was given to Wisconsin on February 19, 1985. This extra staff was provided to accelerate the processing of farm loan applications and other work related to farm credit relief. The allocation was based on the number of borrower requests for debt set-asides as of February 6, 1985, and the number of operating loan and emergency loan applications on hand as of December 31, 1984. The 20 staff years issued to Wisconsin would allow 60 employees to work for four months. The objective of this allocation was to provide relief to farmers in time for the spring planting season. We are continually reviewing staffing levels and will make adjustments to meet workload requirements whenever possible.

Question: Is it not time to take stronger steps than simply relying on attrition?

Answer: We continually review all aspects of workload for loan making and loan servicing in an effort to determine the proper staff for each State. The fiscal year 1985 staff-year allocations were distributed to States whose current loan-servicing and loan-making allocations indicated they were understaffed.

QUESTIONS SUBMITTED BY SENATOR BURDICK

SHORTAGE OF FUNDS

Question: In North Dakota, we have allocated $14.7 million in farm ownership loans for fiscal year 1985. However, $25 million worth of farm ownership loans have been approved. At the end of the year, we will still have over $10 million worth of approved loans waiting to be funded. This does not include those loan applications which are not even being processed. Similarly, in operating loans, North Dakota has an allocation of $56.9 million for fiscal year 1985. In addition, we have received $34.8 million outside of the allocation. Currently, we have $18.0 million operating loans approved but not funded, and there remains only $6.9 million left to be allocated. Given the fact that this year is only half over, do you have any specific plans for dealing with this shortage of funds?

Answer: The Administration is committed to and continuing to make operating credit available this year under the Secretary's interchange authority.

Question: Do you have any plans to request a supplemental appropriation for this year?

Answer: Unless there are unforseen circumstances, we do not plan to request a supplemental appropriation. The pooling of funds and the use of the Secretary's interchange authority will provide adequate operating loan funding for this year.

DEBT SET-ASIDE

Question: The Farmers Home Administation has proposed a debt adjustment program under the Special Debt Set-Aside Portion of the Indebtedness of Farmer Program Borrowers. What is the status of this program?

Answer: The regulation covering the debt set-aside program was published in the Federal Register on October 19, 1984. The debt set-aside program permits a 5-year set-aside of a portion of the indebtedness of existing farmer program loans, with no interest accrual during the set-aside period. No more than $200,000 or 25 percent, whichever is less of a FmHA borrower's indebtedness, may be set aside. This program will be available until September 30, 1985. The debt set-aside is a loan servicing tool to give FmHA borrowers the opportunity to develop plans for continuing their farming operations while the farm economy improves.

In most areas of the country, we are in the middle of the lending season in which the debt set-aside is being combined with other FmHA servicing activities. As of March 21, 1985, 105,761 borrowers had requested the debt set-aside assistance.

Question: Is the eligibility of this debt set-aside limited to operators of family-sized farm units only?

Answer: Debt set-aside is not limited to family-sized farm units. This servicing alternative is available to assist those existing FmHA farm borrowers who have farm operating, farm ownership, soil and water, recreation, only those rural housing loans made for farm service buildings, economic opportunity, economic emergency, and/or emergency disaster loans and who are experiencing severe financial difficulties and need a positive cash flow to stay in business and maintain viable farming operations.

Question: Is the program available to any family-sized FmHA borrower who is delinquent in payments?

Answer: A borrower's eligibility for the debt set-aside is determined by the FmHA county committee, taking into consideration the farmer's integrity and management skills to assure a reasonable chance of success. The FmHA county supervisor approves the amount of debt to be set-aside after calculating the borrower's cash flow projection, using rescheduling and reamortizing authorities at limited resource rates—if the borrower is eligible for limited resource rates. The amount of FmHA debt that can be set aside is the amount needed to create a 110 percent cash flow to pay all debts due including tax liabilities.

Question: Is the program available to those borrowers under the jurisdiction of a bankruptcy court?

Answer: FmHA borrowers under the jurisdiction of a bankruptcy court do not receive set-aside notices because this could be construed to be in violation of the bankruptcy code's automatic stay provision. However, this does not mean that such borrowers are ineligible for debt set-aside assistance. They can incorporate the terms of a set-aside into their proposed Chapter 11 or 13 plans or they can ask the court to allow FmHA to consider granting them set-aside assistance.

Question: What factors do you take into consideration in determining the positive cash flow for a producer under the debt set-aside program?

Answer: The cash flow projection for the purpose of special set-aside is a monthly, quarterly, semi-annual or annual listing of all anticipated cash receipts and disbursements from farm and non-farm sources. A positive cash flow used in the program means that the plan for the typical year during the set-aside period shows a balance available of at least 110 percent of the amount needed to pay all the year's debts due, including tax liability for the year.

HOUSING LOAN PROGRAM

Question: I have been notified by a constituent of mine about a big problem in terms of receiving rural housing assistance. It appears that FmHA will not approve loans for certain areas if it determines that the location is "economically obsolete." What criteria do you use to make a determination that an area is economically obsolete? Does this policy tend to eliminate funding for vast rural areas and is it not in direct contradiction to the purpose of the program?

Answer: Economic obsolescence is a loss in value due to many factors. Economic obsolescence is determined from studies of the neighborhood and the community as a whole. FmHA does not make a determination that an area is "economically obsolete."

In some areas a restriction on lending may be imposed on properties not already in the program where there is an unacceptable rural housing loan delinquency rate and/or large numbers of inventory properties on hand.

The restricted funding levels are necessary, we feel, to allow the limited FmHA staff more time for active servicing efforts to reduce the delinquency and to repair and dispose of the acquired properties. This policy would not eliminate all funding for the area, just reduce it by up to 20 percent. Typically, only affected areas of the county would be restricted from making loans on properties not already in the program. It is sometimes found that local economic factors have contributed to the high delinquency rate and/or the transfer of properties back to the Government for disposition.

Question: In arriving at an appraised value for houses in such areas, you automatically chop off 10 to 20 percent of the value of the house. For example, on a new house costing $50,000 you automatically deduct $5,000 to $10,000 to come up with an appraised value. The proposed homeowner then has to come up with the $5,000 to $10,000 as a down payment. Is there any real justification for reducing the value of a house so arbitrarily? Does this new appraised value reflect the real value of the house?

Answer: FmHA appraised values are determined by an analysis of other comparable sales in the area, as well as the use of Marshall and Swift reproduction cost calculations. There would not be an automatic "lopping" of value from the arrived at market value of a property based solely on stress in the local economy.

In answer to your second question, we do consider and reflect the impact of economic and other factors that may diminish the continued highest and best use of the property. Therefore, such appraisals, we feel, better reflect the real value of the properties being considered.

Question: It seems to me that the real purpose of the policy is to cut back on the program rather than to help with providing rural housing. What are your comments?

Answer: The appraisal policy is not designed to cut back the housing program. However, recession in the local economy does come to bear on housing values as a boom does. FmHA must make sound loans which are adequately secured and our appraisals must reflect the estimated market value of the properties financed as accurately as possible since we loan 100 percent of such value.

FmHA applicants are strongly discouraged from paying more for a house than it is worth. Low-income applicants usually do not have down payments and to allow them to incur indebtedness for a dwelling over and above the actual worth of the property would put at high risk their likelihood of success as homeowners.

LIMITED RESOURCE PROGRAM

Question: The Farmers Home Administration is currently required to designate at least a certain percentage of its allocated farm ownership and operating loan funds for limited resource farmers. Can you tell me what that percentage has been historically? Since this percentage need only be met on a Statewide basis, I understand that certain inequities and problems have arisen with the Administration of limited resource loans in several counties in North Dakota due to the minimum allocations being made on a Statewide basis. That is, the funds allocated by the FmHA to the limited resource loan programs are not uniformly distributed on a county-by-county basis. Is the FmHA aware of these problems?

Answer: In previous years, the law set a minimum level for limited resource loans at about 20 percent of the operating and farm ownership loan programs. This specific provision has been removed from the law. Limited resource loan funds are allocated and controlled by the North Dakota State Director. We have contacted the North Dakota State Director relative to your concerns and were informed that there does not appear to be a major problem in the distribution of limited resource farm ownership and operating loan funds in North Dakota.

Question: Do you have any plans to establish a set percentage of funds that will go to the limited resource program? If so, what percentage?

Answer: The FmHA has no plans to establish a set percentage for the use of limited resource funds this fiscal year. As of March 31, 1984, 59 percent of the operating loan funds and 57 percent of farm ownership loan funds have been made at the limited resource interest rate. The fiscal year 1986 budget does not provide any limited resource loans.

Question: Do you have any plans to provide for a more uniform distribution of the funds among the counties?

Answer: No, we do not have any current plans to provide for a different distribution of funds among the counties. The FmHA will continue to allocate loan funds on a Statewide basis, and loan dockets from the county offices will be funded on a first-come first-served basis.

APPROVED LENDER PROGRAM

Question: In a new regulation, Secretary Block announced that substantially all institutions of the Farm Credit System will now qualify as FmHA approved lenders, enabling them to apply to FmHA for loan guarantees under streamlined procedures. Can you comment on the effectiveness and effect of this regulation? Is it helping with the current farm credit crisis?

Answer: The amended Approved Lender Program regulation published on March 22, 1985 allows member institutions of the Farm Credit System with farm loan losses comparable to other commercial banks to qualify under ALP. This should allow most member institutions of the FCS to participate in the prrogram. We expect this to help FCS members with crop loans this spring.

STANDARDS FOR FAMILY FARM SIZE

Question: Several of the Farmers Home loan programs are available to family farmers only. However, there are no guidelines for establishing what constitutes a family farm. This determination is left up to each county committee. Do you have any plans to set up guidelines for determining what qualifies as a family farm and for tightening up the criteria in this regard?

Answer: FmHA has regulations that provide guidance to county committees in administering the family farm concept. However, FmHA will be considering some changes to the family farm definition to assist county supervisors and county committees. Such specific changes will include guidance concerning the basic family unit and hired and seasonal labor requirements of the farming operation.

SHORTAGE OF FUNDS

Question: Recently, you authorized the expenditure of additional funds to hire extra personnel and to pay overtime in order to speed the processing of farm operating loans. However, isn't a major problem in this area the lack of funds available for loans which have already been approved? What are you, or what do you intend to do in this area?

Answer. No, there is not a lack of funds. The Administration is committed to making sufficient funds available under the Secretary's interchange authority.

Question: The proposed budget eliminates funding for new housing assistance for rural areas and indicates such assistance will be transferred to the Department of Housing and Urban Development. Do you have any assurance that HUD will take over this program? At what level of funding will HUD administer the program?

Answer: Yes, we do. The President's proposal will increase the percentage of its housing assistance provided to non-metropolitan areas to 50 percent beginning in fiscal year 1988 which approximate the urban/rural split of Federally assisted units over the past few years. Consolidating the responsibility of Federal housing assistance in one Agency, HUD, will result in budgetary and program improvements. HUD programs are quite flexible for the recipients and less costly to the taxpayer than FmHA programs. As future budget proposals unfold, we are confident that the President will provide for appropriate funding levels for these programs.

QUESTION SUBMITTED BY SENATOR STENNIS

Question: The Farmers Home Administration currently has a program by which it makes grants to rural communities who have a need for water and/or sewage facilities, and which meet certain eligiblity requirements. Those requirements include a maximum average family income which is lower than 85 percent of the State average income.

This requirement has an adverse affect on four States—Mississippi, Alabama, Arkansas, and Missouri. In these States the average State family income is so low that some communities can have average income below the national poverty line and still over 85 percent of the State average income. In other words, many communities who are poverty stricken cannot qualify for a grant even though their residents cannot afford to pay additional utility costs.

An example of this problem in Mississippi is the community of D'Iberville, just north of Biloxi. Several years ago, D'Iberville installed a water system with the help of a Farmers Home Administration loan. The cost to the local residents of repaying the loan is so high that they cannot afford additional sewer charges.

The Mississippi Bureau of Pollution Control has required that a sewer system be installed soon or they will close down public eating places and other food handling places.

The Federal poverty level per family is $10,200. The State median income for Mississippi is $11,062. In order to qualify for a grant at 85 percent of the median income, D'Iberville's average income would have to be $9,403. The actual level is $10,001 which, as you can see, is below the Federal poverty level but above the threshold for eligibility.

On January 29 you wrote to me and said, "We are in the process of reviewing the existing regulations to determine what changes may be needed to correct this situation." I understand that the review process began as early as October of last year. Today is March 26--how long does it take you to review and when will you resolve this problem?

I have an amendment which Senator Bumpers and I intend to offer on the next appropriate legislation which will solve the problem in two ways. First, it will prohibit the threshold for eligibility from being below the Federal poverty line. Secondly, it would allow the Secretary of Agriculture to waive this requirement if health problems exist, such as in D'Iberville.

Answer: On April 2, 1985, the Farmers Home Administration will publish in the Federal Register a change in Community Program loan and grant regulations. This change will eliminate restrictions in FmHA regulations that make certain rural communities with median household incomes below the poverty line ineligible for the intermediate interest rate and grant assistance.

QUESTION SUBMITTED BY SENATOR BAUCUS

Question: According to the recent Billings Gazette article which is attached, there are 3,077 FmHA existing loans in Montana and an additional 1,368 new applications this year. I would specifically like the FmHA to provide the number of new employees they are assigning to Montana and how much additional funding they expect to release and when these funds can be expected by the Montana FmHA.

Answer: We have allocated 57 new temporary positions to Montana FmHA and they have presently hired 34 new employees. Please be assured that Montana will have adequate funds available for all operating loan needs for this fiscal year.

FMHA'S STAFF SWAMPED

[From Billings Gazette, March 25, 1985]

LIVINGSTON (AP)—A record number of Montana farmers and ranchers has asked the Farmers Home Administration for loans this spring, but the agency has neither enough staff nor enough money to process them, according to farm programs director Roger Van Valkenburg.

The new applications for money to prepare for spring planting may not be processed until July, he said.

Throughout the state, 3,077 farmers and ranchers already have FmHA loans, and they have priority over the 1,368 who have applied for first-time loans, Van Valkenburg said.

The size of the loan requests has increased from an average of about $45,000 to about $70,000, he said.

"The situation is tighter than ever before," Van Valkenburg said. "The critical need we have this year is for operating credit. If we had twice as many people processing loans, we might meet those needs in a timely manner."

He said more loan processors may be hired, but it will be difficult because people with experience in agricultural lending are not usually available on a part-time basis.

He said the Montana FmHA office has only $2 million remaining from the $27 million it was allocated for operating loans in 1985, but the agency is juggling other funds to make more available.

"Washington has assured us that we will have enough funds to get our farmers and ranchers going," Van Valkenburg said.

The money will come from FmHA programs in other states and from non-farm programs in the Montana office, he said. The agency has shifted funds that way for the past four years, but never to the extent necessary this year, he said.

The FmHA is the lender of last resort for farmers and ranchers and requires that applicants must have been turned down by two other lending agencies. The FmHA estimates that 10 percent of the nation's producers met that qualification.

FARMERS CREDIT ADMINISTRATION

QUESTIONS SUBMITTED BY SENATOR COCHRAN

Farm Credit "Crisis"

MR. COCHRAN. Governor Wilkinson, in your statement, you say that almost half of all U.S. farmers are essentially debt free. How did these farmers manage to avoid debt problems? Are they the good managers, efficient farmers, or what?

MR. WILKINSON. Approximately one-third of the nation's nearly 2.4 million farmers have very low debt burdens (debt-to-asset ratios of less than 10 percent), another third have moderate debt burdens (debt-to-asset ratios of less than 40 percent), and another third are carrying very high debt burdens (debt-to-asset ratios in excess of 40 percent). This pattern of indebtedness is widely distributed throughout the nation and generally characterizes all sizes and types of farms.

Those with heavy debt burdens often either entered farming during the decade of the seventies, or expanded their operations substantially during this period. The decision to enter or expand was taken in response to market signals which were legitimized by government officials, the financial community, the press, and agricultural universities, all of whom trumpeted agriculture as a growth industry. During this period, real interest rates were effectively negative and it made good economic sense to borrow. Agricultural prices, exports, and income were high and generally rising. There was great optimism that this "golden age" for agriculture would continue. Market signals supported this view. Those who expanded during this period were good managers and technically proficient farmers. Their current plight is, in large measure, due to events beyond their control and which could not have been predicted. To conclude that those with low current debt are therefore better managers is incorrect. More likely, they simply chose not to expand during the 1970s, a decision which could have been taken for a variety of reasons.

MR. COCHRAN. Governor, your statement offers the observation that "the only realistic alternative for most highly leveraged farmers is to reduce the debt levels." You also say that more credit cannot be a substitute for increased income under present circumstances.

a. Under those assumptions, do you think it is a good idea for the government to continue to supply increasing amounts of credit?
b. How can farmers reduce their debt levels? If they must sell assets, how can this be done so that the market is not flooded with land and equipment?

MR. WILKINSON. While we believe both debt and asset adjustments are essential for many farmers, certain situations justify increasing amounts of credit. FCA supported additional credit for 1985 on an emergency basis. The purpose was to get through the current planting season and "buy time" to work out more permanent solutions through the farm bill. Beyond short-term emergency loan assistance, FCA would support increasing amounts of credit only when a temporary situation exists and financial viability can be demonstrated within the near future.

Forcing large numbers of farmers to sell assets has serious potential consequences. Markets for land and other assets could be swamped by too rapid a rate of liquidation. Land and other asset prices would then be driven below the long-term normal level (based on current economic prospects), and this would, in turn, destroy the financial viability of many additional farmers.

FCA believes that the Federal Government may need to develop some mechanism to spread these adjustments over a longer time period than the market forces would allow. Land, in particular, changes hands at a rate of only 2 to 3 percent per year under normal circumstances. Present financial stress data suggest that at least triple this amount will have to change hands in the near future.

MR. COCHRAN. Governor, you discuss the effect a reduced interest rate would have on the agricultural sector. You state that reducing interest rates will be only marginally helpful. Could you discuss your reasoning for this statement?

MR. WILKINSON. The basic problem is that so many farmers have debt-to-asset ratios of 40 percent or more. The rate of return on agricultural investment is too low to support heavily leveraged operations. Nationally, the rate of return on investment is about 2 percent although there are agricultural operations with very attractive rates of return.

On page 4 of my statement I have included three tables relating returns on investment to the percent of leverage on farm assets at varying interest rates. A negative percentage in those tables indicates that the level of debt is too great to generate a positive cash-flow at that rate of return. The tables indicate that at a 2 percent or 3.3 percent return on investment, farmers that have debt-to-asset ratios of more than 40 percent will have a negative return on their investment (except that, if the interest rate is held down to 7 percent and the debt-to-asset ratio is only 40 percent, there will be a positive return at a 3.3 percent rate of return on investment).

The key to strengthening a farmer's ability to support heavy debt loads is increasing rates of return on investment. The tables on page 4 of my testimony show that a rate of return of 4.5 percent, a combination of increasing returns on investment and lowering interest rates would help farmers with higher debt-to-asset ratios, but taking the tables together, simply lowering interest rates will only help marginally.

Farm Credit System

MR. COCHRAN. Governor, you stated that loss reserves at 36 of the 37 Farm Credit Banks have actually increased. How did this occur?

MR. WILKINSON. Current year earnings are used to cover losses and build reserves for losses where appropriate. Because there are continuing pressures on farm credit portfolios that will result in high loss levels in 1985, Farm Credit System banks are taking the precaution of increasing loss reserves.

In addition, some production credit associations had loan losses in 1984, which reduced their reserves for losses. This poses a higher risk of loan losses at the bank level and a greater need for reserves.

MR. COCHRAN. You also state that, for the nation's 100 largest cooperatives, net margins were dramatically higher, although revenues were lower. You say that another sign of increased strength is a greater cash-flow and a reduced reliance on debt. Would you suggest that cooperatives are the way to go in order for farmers to become more efficient and financially more stable?

MR. WILKINSON. Our comments on cooperative performance in 1984 referred to improvements from a very depressed 1983, when the PIK program effects were felt. While we support the use of farmer cooperatives in the input and market supply areas, it is not clear that cooperative farming would necessarily add efficiency or stability.

Liquidations and Mergers

MR. COCHRAN. You mention liquidation of 11 production credit associations (PCAs) in the last 21 months, and the merger of 39 PCAs with neighboring associations in the first 11 months of 1984. What impact has this had on services provided?

MR. WILKINSON. It is a primary responsibility of the Farm Credit Administration to ensure that all geographical areas have adequate credit services available. Therefore, in liquidating an associaion or approving the merger or voluntary liquidation of an association, our agency arranges or reviews proposed arrangements to be certain that credit services to all eligible borrowers continue. In fact, some of the 39 mergers cited were for the purpose of improving the efficiency and effectiveness of credit services.

Nevertheless, where an institution is liquidated or merged because of financial difficulties, there may well be impacts on service. In the case of merging a strong PCA with a weak PCA, interest rates may increase for members of the stronger PCA. Conversely, where an association is liquidated, the association that takes over the territory takes only the good loans, but the high-risk loans continue to create losses that must be borne by the PCA stockholders of that liquidating institution.

In addition, there is often a loss of confidence in an association or in the System when liquidations take place. In a merged PCA, borrowers with strong financial positions facing higher interest rates may leave the association and obtain financing with another lender. This is particularly true in the Farm Credit System because members must purchase stock that could become impaired if an association fails and must be liquidated. The result of strong borrowers leaving an association tends to weaken that association and results in still higher interest rates.

Borrowers who are current in their loan payments should experience no real change or loss of service because of a merger or liquidation. In fact, in many instances, services are improved. On the other hand, borrowers whose loans are severely delinquent may be faced with appropriate but stronger collection pressures from a receiver or merged association.

Finally, it should be emphasized that System institutions are using mergers as a means of improving efficiency and effectiveness of service to borrowers. Economies of scale and alignment of association boundaries to achieve economies of scale, reduced overhead, joint management, and greater consolidation lead to more competitive interest rates and better service to members.

Agricultural Conservation Corporation

MR. COCHRAN. Many farmers today would like to voluntarily retire all or some of their debt by selling part of their assets - perhaps part of their machinery or land. However, they can't afford to do this as their losses would be too severe. I am told there is a proposal around to establish an Agricultural Conservation Corporation. The purpose would be to stabilize farm asset values and provide for the conservation of fragile land resources.

a. Do you see a real value of such a corporation?

b. Would the benefits to be gained offset the cost to the government of the 10-year program (estimated to be $31 million)?

MR. WILKINSON. There is a pressing need to do something to halt the continued deterioration of asset values, land as well as machinery and equipment. Unless this is done, those farmers who today are financially strong, will find themselves joining the ranks of those we now call severely stressed. If preventing further decline in the value of agricultural assets requires creating a new institution, then it should be given serious consideration.

Farm Credit "Crisis"

MR. COCHRAN. You say that almost one-fifth of farm borrowers, "typically concentrated in the larger sales classes and in certain regions of the country," are having serious financial problems. Most complaints we hear are to "save the family farm." Your statement seems to imply that it is the larger farmers who are in the most trouble.

a. Is this the point your statement is making?

b. What "certain regions" are you referring to as being the most severely affected?

MR. WILKINSON. Not fully. It is true that much of the debt and many of the highly leveraged farms are in the larger sales classes. However, one must also consider that these classes typically include (1) many family farms and (2) the debt/asset ratio may not be as good a measure of financial stress for either very large or very small sales classes. USDA makes this point in their recent Agricultural Information Bulletin 490, and classifies all farms with sales of $50,000 to $500,000 as "family sized commercial agriculture."

We conclude that family farms have a very large proportion of the serious financial problems. The most severely affected areas are those brought into more intensive agricultural production as a result of expectations built on prices of the mid-1970s.

Farm Credit System

MR. COCHRAN. What results do you expect from the financial feasibility study being done for the production credit associations? What aspects are being studied?

MR. WILKINSON. The purpose of the financial feasibility study is to determine the possible financial condition of each component of the Farm Credit System over the next 3 years and the development of recommendations for programs to deal with these conditions. With respect to production credit associations, each district bank was supplied with defined underlying economic assumptions that were critical to the credibility of requested forecasts. Each district PCA was then modeled under a set of three possible economic scenarios to determine what their financial position might look like in the future. The entire balance sheet and income statement of each association is contained in each study. The results of all PCAs in each district and ultimately the nation were then aggregated in an attempt to quantify possible exposure problems.

The study is being conducted as part of the FCA examination process and will be used internally as a means of identifying System strengths and weaknesses and designing appropriate Systemwide and district-by-district solutions. The study will not be completed until May 1985.

Location of Financial Problems

MR. COCHRAN. In your prepared statement, you have noted that 15-20 percent of the farmers who borrow money have borrowed enough to be in financial difficulty. If I understand correctly, the troubled borrowers are typically concentrated in the larger sales classes and in certain geographical regions.

a. What are the dollar sales volume categories that financially strapped farmers generally fall into?

b. What regions have the greatest concentrations of farmers in financial difficulty?

c. How do these data match with all the discussion about the end of the family farms?

MR. WILKINSON.

a. As of January 1, 1984, there were nearly 386,000 farm operations that were classified as highly leveraged or very highly leveraged, by virtue of their having a debt/asset ratio in excess of 40 percent. Nearly 90 percent of these farms had less than $100,000 in sales, categorizing them as either family farms or part-time operations (columns 1 and 2 below). However, on average, farmers in the highest sales classes have the highest debt/asset ratios (col. 3).

Sales Class	(1) Number of Highly Leveraged Farms (D/A Ratio>40%)	(2) Percent of Total	(3) Percentage of Class
$500,000 and over	9.700	2.5	32.5
$250,000-499,999	28,600	7.4	31.6
$100,000-249,999	79,200	20.5	27.7
$50,000-99,999	70,400	18.2	23.4
$25,000-49,999	48,400	12.5	17.6
$10,000-24,999	46,400	12.0	11.9
Less than $10,000	103,200	26.7	12.6
Total	385,900	100.0	17.7

b. The Lake States, Northern Plains, Northeast, and Mountain States have the highest proportions of highly leveraged farms. This is partially explained by the concentration of dairy farms in the Lake States and Northeast and livestock farms in the Mountain States and Northern Plains:

Region	Percent of class with Debt/Asset Ratio >40%
Lake States	22.5
Northeast	19.8
Mountain States	19.2
Northern Plains	18.3
Corn Belt	17.8
Southern Plains	15.9
Pacific States	15.8
Southeast	15.0
Delta States	14.4
Appalachian	12.0
United States	17.7

c. Farms with sales of between $50,000 and $500,000 are the mainstream of family size commercial agriculture. Most operators with sales under $50,000 are part-time farmers who obtain most of their income and repay their loans from off-farm sources. Operators in the over $500,000 sales class typically operate with high debt/asset ratios, but because of economies of size have positive cash flows. Unlike the largest and smallest sales classes, the family size operations depend almost entirely on farm income to meet their debt-servicing needs. Of the estimated 679,000 family farms, USDA estimates that nearly 26 percent had serious financial problems in 1984 (debt/asset ratio greater than 40 percent) and projects that 44 percent are facing some degree of financial stress this year.

QUESTIONS SUBMITTED BY SENATOR MCCLURE

Enforcement Powers

MR. McClure: Mr. Wilkinson, I have been following the situation in the 12th district very closely for the last year. I remain extremely concerned with the situation there. Officials with the FCA have met in my office to discuss the liquidity situation of the 12th District FICB. The recent infusion of $25 million and the additional request for $300 million for the 12th District will make the District solvent this year.

Mr. Wilkinson, is it true that FCA is asking for the same powers as FDIC such as cease-and-desist powers over local PCAs in order to avoid the liquidation proceedings already set up previously by the Farm Credit System? Why are you asking for such powers?

MR. WILKINSON. The Farm Credit Administration is asking for cease-and-desist, director and officer removal, and money penalty enforcement authorities, which are exercised by every other Federal financial institution regulatory agency. This is not in lieu of liquidation authority that is required under certain circumstances by the Farm Credit Act, but a means for FCA to intervene when a Farm Credit System institution is being operated in an unsafe or unsound manner and corrective action is either not taken or is inadequate. We hope that by using intermediate enforcement authorities, some liquidations and mergers in the future might be avoided.

The Farm Credit Administration has inadequate authority under existing law to carry out the responsibility Congress has given it. In most instances, System institutions voluntarily take corrective action when weaknesses are brought to their attention. In some cases, however, agency requests for corrective action are ignored or inadequately heeded. Not only are the existing powers of the agency ill-suited to bring about corrective action, but the institutions are given inadequate administrative and judicial review rights.

The Farm Credit Administration supports S. 466 which contains authorities for the Farm Credit Administration to exercise cease-and-desist, director and officer removal, and money penalty powers, and the concomitant rights and procedures for administrative hearings and judicial review. We believe that such powers have proven effective regulatory methods and provide adequate precedent. Based on the experience of other financial institution regulators, we believe these powers will permit FCA to correct problems before a System bank or association must be liquidated because of insolvency.

Insurance

MR. MCCLURE. Is it also true that the FCS wants to be insured by the FDIC?

MR. WILKINSON. The FDIC insures bank deposits and System institutions are prohibited from accepting deposits. We studied the concept of insurance for Farm Credit System borrowers as a means to bolster confidence in an important component of the Nation's financial system. Because the System is restricted to lending in a single economic sector — agriculture — and must obtain reliable access to financial markets in order to be a reliable source of financing, stability is as important as in depository institutions.

We have concluded, however, that insuring member-equity risk in cooperative Farm Credit System institutions might cause concerns in the investment community over Farm Credit System equity thereby weakening the System's financial statements and resulting in higher cost of funds. Therefore, we have ceased any further consideration of a member-equity insurance program.

Liquidation Proceedings

MR. MCCLURE. Some borrowers of the liquidated Southern Idaho PCA feel that the liquidator is arbitrary and capricious in the decisions made in the various liquidations still underway in the area. What avenues are open to those who must deal with this liquidator and the decisions made?

MR. WILKINSON. The primary responsibility and objective of the receiver of a System institution is to collect its debts and liquidate its assets in a manner consistent with the best interests of the stockholders and creditors of the institution. As with an ongoing System institution, the ability of the receiver to liquidate individual loans is dependent on the respective rights of the debtor and creditor as defined under state law. Those state laws establish the procedural rights and remedies available to both debtors and creditors when there has been a failure to comply with the terms of a loan contract. As with the operations of ongoing associations, FCA does not intervene in individual debtor/creditor disputes except to the extent that there may be violations of Federal laws over which FCA has jurisdiction. The Farm Credit Administration periodically examines the receivership to ensure that its operations are consistent with applicable Federal laws and regulations and orders issued by FCA. The primary purpose of these activities is to ensure that the receiver is adequately carrying out his responsibility as a "trustee" for the receivership estate. If that responsibility is not being adequately carried out, appropriate corrective actions are taken.

Federal Assistance for Farm Credit System

MR. MCCLURE. Mr. Wilkinson: Why are The Farm Credit Council and the Farm Credit Administration saying that the financial problems of the Farm Credit System must have federal financial assistance while at the same time running advertisements by the District Banks as to the financial security of the Districts and the Farm Credit System? Des Moines Register March 18, 1985.

MR. WILKINSON. The Farm Credit Administration is not recommending that any Federal funds be directly injected into System institutions now or in the future. We are studying the concept of insurance for borrowers' equity investments in System institutions that will be backed by authority to borrow from the Treasury should that become necessary. We may request that two revolving funds in Treasury presently available for use by the Governor for buying stock in System institutions be transferred to a new account to provide seed money for that insurance fund.

The Farm Credit Council, which is a private trade association representing Farm Credit System institutions, is recommending the creation of an Agricultural Conservation Corporation (ACC) that would have the authority to buy acquired property from all commercial lenders in order to stabilize agricultural land prices. The Farm Credit Council's recommendation has the objective of stabilizing land prices by taking surplus farm land out of production.

Agricultural Credit Corporation

MR. MCCLURE. The Farm Credit Council has just proposed an Agricultural Credit Corporation to buy nonperforming agriculture assets. How do you see the funds being raised? What impact would this Corporation have on Agricultural land nationwide?

MR. WILKINSON. The Farm Credit Council, a trade association representing the Farm Credit System, is developing a proposal to establish what they call an Agricultural Conservation Corporation. The proposal is not yet complete and therefore it is inappropriate for me to comment on details.

The Farm Credit Administration recognizes the need to stop the erosion of farm land values and supports the overall concept. Properly structured, a Federal investment in surplus agricultural land can assist agricultural producers and lenders. It can provide protection against the erosion of land values that supports farm credit, which, if it is permitted to continue, could result in heavy losses to agricultural lenders threatening their continued viability in the future or destabilizing land prices further by forcing banks to place acquired land on already depressed real estate markets.

Spokane District

MR. MCCLURE. Just recently, FCA announced a plan to reorganize the Spokane District. Is this plan now in effect? Please comment on the financial viability of other Districts such as the Omaha District, Wichita, and Louisville?

MR. WILKINSON. In March 1985, the 37 banks of the Farm Credit System finalized an Interim Loss-Sharing Agreement designed to offset the operational losses incurred by the Federal Intermediate Credit Bank (FICB) of Spokane through September 30, 1985. The agreement was designed only as an interim measure to enable long-term solutions to be fully explored. The interim plan is presently in effect.

The Spokane District production credit associations are considering a merger plan to achieve operational efficiencies and economies of scale. However, at the present time, no final decisions relative to the Spokane District PCAs have been made. I will be pleased to meet with you at your earliest convenience to discuss the financial viability of any districts in the Farm Credit System.

Delinquent Payments by Banks and PCAs

MR. MCCLURE. Many banks and PCAs have previously made the FLB payments which are normally due March 1 of each year. Due to the financial crunch, tight cashflows, and marginal equities these payments are not being made by banks and PCAs this year. How will the FCS deal with this situation?

MR. WILKINSON. The inclusion of planned payments to other creditors, including the FLB, in the member/borrowers' annual PCA loan budget, has been a practice that varies throughout the Farm Credit System. Such payments to other creditors are dependent on a particular loan to a PCA borrower and are considered credit decisions. Extending credit in the absence of profitable operating performance and in the absence of a basis of continued viability would not be prudent for either the borrower or the lender.

Based on the most recent System loan information, FLBs are experiencing increasing delinquency and nonperforming loan levels. However, this is reflective of the Farm Credit System's philosophy of aiding a member-borrower through forbearance. The System is dealing with the current situation by working with borrowers who can be helped through forbearance.

Loan Refinancing

MR. MCCLURE. PCAs and bank managers have complained that the FCS is not willing to refinance short-term carryover debt on real estate which was a common practice in previous years. Could you comment on policy changes implemented by the FCS which have produced this current situation?

MR. WILKINSON. Institutions that comprise the Farm Credit System are independent financial cooperatives whose primary objective is to provide the American farmer, rancher, and aquatic producer and harvester with sound and adequate credit. As you know, during the past several years, the market value of agricultural land has decreased and, consequently, the equity available to secure production carryover debt has declined. The decision to refinance short-term carryover debt is a credit decision. Individual Farm Credit System institutions, through their borrower/member boards of directors, adopt policies that best suit the needs of the institution. It is through these district board policies that the interests of all borrower-members are served. The Farm Credit Administration has general supervisory, regulatory, and examination responsibility over the banks and associations in the Farm Credit System and, as such, does not attempt to intervene in specific credit or other policy decisions made by the banks and associations of the Farm Credit System except where such policy contravenes Federal law or regulation.

Spokane District Losses

MR. MCCLURE. I have heard that the Spokane District has lost $400 million in loan volume in the last 18 months. Could you please comment on the loss of loan volume in Spokane and nationwide?

MR. WILKINSON. Each of the 12 Farm Credit districts consists of a Federal land bank and corresponding Federal land bank associations, a Federal intermediate credit bank and corresponding production credit associations, and a bank for cooperatives. Between December 31, 1983, and December 31, 1984, the Spokane District, as a whole, experienced a loan volume decrease of $277.8 million. The production credit associations experienced loan volume reductions of $361.8 million during that period, while the Federal land banks increased in loan volume by approximately $85 million. Nationwide, the Farm Credit System experienced loan volume decline by $1.66 billion, from approximately $85 billion at December 31, 1983, to $83.3 billion at December 31, 1984.

QUESTIONS SUBMITTED BY SENATOR ABDNOR

Debt Adjustment Program

MR. ABDNOR. The Farm Credit Administration has about one-third of all agricultural loans in the United States. With this fact in mind, what percentage of your borrowers do you intend to help by participating in the debt adjustment program?

MR. WILKINSON. The Farm Credit Administration (FCA) is an independent agency in the executive branch of the government having supervisory, regulatory, and examination responsibility over the cooperatively owned banks and associations in the Farm Credit System (System). The 12 Federal land banks, 12 Federal intermediate credit banks, and 13 banks for cooperatives, along with approximately 900 member/borrower-owned associations, constitute the Farm Credit System.

System institutions are member-owned cooperatives, which are not subsidized in any way by the government and must operate on a self-sustaining basis. Their business is administered by local boards of directors elected by the member-owners. The lending authority of these banks and associations is contained in the Farm Credit Act of 1971, as amended, and the banks and associations have developed policies based on this Act and Regulations that specifically define their lending authority. The credit policies are established by the boards of directors, who must consider not only the obligation to render the maximum credit service to each individual borrower, but the interest of the entire membership.

In response to a request from Secretary of Agriculture Block, I provided numerous suggestions that would increase cooperation between the

Farmers Home Administration (FmHA) and System institutions. One such recommendation was to provide System institutions a less cumbersome process to participate in the Approved Lenders Program. I am pleased to say that based upon my recommendations, on March 22, 1985, FmHA published amended regulations allowing System institutions blanket eligibility as approved lenders. I cannot comment on the exact percentage of System borrowers who will be helped by the DAP; however, I have encouraged all eligible System institutions to participate. The final decision to participate, however, is a credit decision, and appropriately remains with the individual institutions of the Farm Credit System.

MR. ABDNOR. For how many farmers have you processed the paperwork for participation in the debt restructuring program?

MR. WILKINSON. The Farm Credit Administration, as the regulator of the Farm Credit System, does not process paperwork for the cooperatively owned institutions of the Farm Credit System. Participation in the Debt Adjustment Program is considered an individual credit decision made by the banks and associations comprising the Farm Credit System -- a decision in which FCA does not normally intervene. The best source of information on the number of DAP guarantees issued to Farm Credit System institutions would be the Farmers Home Administration.

MR. ABDNOR. Have you advised District Offices that they should try to make use of the Debt Adjustment Program?

MR. WILKINSON. I recently held a series of meetings with Farm Credit System personnel to identify ways to more effectively cooperate with the Farmers Home Administration. I have written to Secretary Block making specific recommendations for improved coordination and program delivery.

Subsequently, the Farm Credit Administration has worked closely with the Department of Agriculture to liberalize its criteria for Farm Credit System institutions to qualify as approved lenders. Approved lender status permits more rapid and efficient processing of loans qualifying under the Debt Adjustment Program. Secretary Block has now approved program changes that permit most Farm Credit System institutions to automatically become approved lenders. I have urged Farm Credit System institutions to participate in the program.

Credit Availability

MR. ABDNOR. What percentage of your borrowers will not be able to receive operating credit from your System?

MR. WILKINSON. We estimate that 8 to 10 percent of present Farm Credit System borrowers will be unable to obtain new loans or renew existing loans in 1985. Some of these borrowers will be able to obtain financing from the Farmers Home Administration or otherwise be able to retain their farming operations, but many will be forced out of farming altogether.

Most of the borrowers who find themselves in this situation are over-leveraged in terms of the likely return on their agricultural investment. Generally, that means they have debt in excess of 40 percent of their assets, although some operators can maintain viable operations with more than 70 percent debt-to-asset ratios.

Omaha District

MR. ABDNOR. The Spokane District of the Farm Credit System is in trouble and many rumors have been abounding about the Omaha District. What is the current situation in the Omaha District? Is it in trouble?

MR. WILKINSON. It is true the Federal Intermediate Credit Bank (FICB) of Spokane has incurred losses of such a magnitude that the other 36 banks comprising the Farm Credit System have agreed to fund the Spokane FICB's operating losses on an interim basis until all long-term solutions may be investigated. Oftentimes the rumor of a production credit association or FICB's encountering adversity may cause borrowers with strong financial positions to leave the association and obtain financing with another lender. This exodus of borrowers, sometimes without cause, disrupts credit service to the territory and causes the remaining borrowers to pay more interest rates because of the higher operating cost per borrowed dollar. To avoid unnecessary disruptions of service to the farmers and ranchers in the Omaha District, I will be pleased to meet with you at your earliest convenience to discuss the current situation in any Farm Credit district, including the Omaha District.

SUBCOMMITTEE RECESS

Senator COCHRAN. We will have another hearing on the Department of Agriculture's budget next Tuesday, April 2, in the same room, beginning at 10 a.m.

At that time we will be hearing from representatives of the Commodity Credit Corporation, the Foreign Agricultural Service, the General Sales Manager, the Office of International Cooperation and Development, the Soil Conservation Service, and the Agricultural Stabilization and Conservation Service. It will be a full hearing. Until then, we stand in recess.

[Whereupon, at 12:10 p.m., Tuesday, March 26, the subcommittee was recessed, to reconvene at 10 a.m., Tuesday, April 2.]

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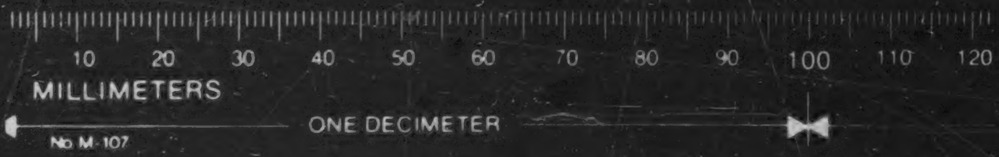
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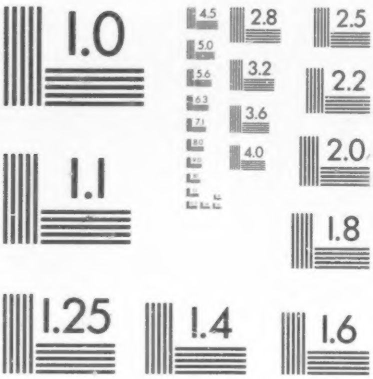
MILLIMETERS
ONE DECIMETER
No. M-107

MICROCOPY RESOLUTION TEST CHART
NBS - 1010a
(ANSI and ISO TEST CHART No. 2)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